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Notes on North American TACHINIDÆ *sens. str.* with descriptions of new Genera and Species.

PAPER III.*

BY C. H. TYLER TOWNSEND.

This paper is in continuation of the work begun in Paper II, on the Tachinidæ *sens. str.* I offer no excuse for the large number of new genera which appear in the following pages. The N. American Tachinidæ have been so little studied that by far the greater portion of them are undescribed, and it is little wonder that so many new forms present themselves upon a critical study of a considerable amount of material.

The detailed character of the generic descriptions may be criticised by some, but I believe that few characters will be found mentioned in them that are not of generic importance. It is well to state here that the types of all forms described in this paper, and in all other papers heretofore published by me, are contained in my own collection.

Dejeania rutilioides Jaenn.

One specimen from Guanajuato, Mexico (A. Dugès), has the palpi black. Two specimens from Manitou, Col., have the palpi yellow.

Hystieria abrupta Wd.

One specimen from Michigan; five from Allegheny, Pa., June 20th to July 9th (G. Ehrman); twenty-one from Ithaca, N. Y., June 1st to September 2d (J. H. Comstock); two from Ottawa, Can., July 12th (Harrington). These show almost no variation. One of the above specimens Prof. Comstock reports as possibly bred from *Halisidota caryæ* (iss. June 1st).

Saundersia signifera Willist., Trans. Am. Ent. Soc. xiii, 304.

This species seems to differ from *S. macula* Mcq. only in the testaceous scutellum, and in being a little larger. Mr. Van der Wulp has shown (Biol. C.-A. Dipt. ii, 22) that *Tachina signifera* Wlk., to which the *Saundersia* described by Williston (l. c. 303-4) was doubtfully referred by him, is almost certainly not a *Saundersia*. The present species will therefore be known as *S. signifera* Will. I have two specimens, 11 to 12 mm. long. A male from Illinois (Robertson) has the femora black, except tips, and the front tarsi are not hairy. A female, without label or antennæ but perfect otherwise, has the

* Paper I.—Proc. Ent. Soc. Washington, ii, pp. 134-146.

Paper II.—Trans. Am. Ent. Soc. xviii, pp. 349-382.

legs entirely yellowish red. Both specimens have the exact golden yellow spot on the fourth segment which Dr. Williston described for *S. signifera*, except that the anterior dilatation is continued by a short median narrow line on the third segment, forming a cross-shaped marking. A specimen from New York (Ithaca, June 2d, Comstock) has the same spot, the femora black, except at ends, and the antennæ entirely flavous or testaceous.

Belvosia bicincta Rob. Desv. See Williston, Trans. Am. Ent. Soc. xiii, 302-3.

I believe, with Dr. Williston, that this is a good species. I can further add the following distinctive characters between this species and *B. bifasciata*. The facial ridges of *bifasciata* are provided with strong bristles, which are lacking in *bicincta*, and the cheeks are more hairy. The sides of the face are bare in both species, but the whole anterior aspect of the head is altogether more bristly in *bifasciata*. I have five specimens of *bicincta* from New Mexico, and only one of *bifasciata* from the same locality. In regard to the length of the third antennal joint in *bicincta*, it is scarcely longer than the second in my five specimens. There are distinguishing characters of ordinary generic value separating these two forms—the great difference in length of the antennal joints, and the ciliate or bare facial ridges—and the two have for half a century been considered identical!

Three *Belvosia* from New York (Comstock) are all *bifasciata*; one from Kingston, Jamaica (T. D. A. Cockerell), is *bicincta*.

Blepharipeza adusta Lw.

Two specimens from California (Coquillett).

Blepharipeza leucophrys Wd.

Two specimens from Guanajuato, Mexico (A. Dugès). The palpi are black, rufous only on tips.

Blepharipeza bicolor Mcq.

I identify two specimens as this species. One from Ithaca, N. Y., June 1st (Comstock), the other from Pennsylvania (C. W. Johnson). They fit Macquart's description well, except that the scutellum is testaceous on apex. The abdomen is not so broad as in *B. leucophrys*, and while both the above species have the antennæ wholly black, this species has the first two joints rufous.

I have also two or three unnamed species of *Blepharipeza*, which will be described in another paper, not including the following described species.

Blepharipeza rufescens n. sp. ♀.—Eyes brown; front about one-third width of head at vertex, much wider before; frontal bristles descending obliquely as low as base of third antennal joint, some weaker bristles still lower and also on sides of front; two orbital bristles; frontal vitta velvety brown, edges more or less silvery; sides of front silvery cinereous, face and cheeks silvery white; vibrissæ decussate, inserted above oral margin; antennæ shorter than face, second joint elongate, third about twice as long as second, first two joints yellowish rufous, third grayish brown, arista brown, 3-jointed, second joint short; proboscis not longer than height of head, fleshy, brown, palpi rather long, bowed, thickened, silvery yellowish, black-bristly; occiput silvery, gray-hairy. Thorax silvery-white pollinose, with two narrow dark vittæ lost beyond suture, sides posteriorly and hind margin narrowly rufous, scutellum rufous. Abdomen clear shining rufous, with a heavy median black vitta, which is widest on first segment, where it occupies about middle third of dorsum, irregularly narrowing to a point just before tip of anal segment, widened at sutures; first segment with a lateral macrochætæ and a median marginal pair; second with a lateral pair and two median marginal pairs, one pair on each side of vitta; third with a marginal row of about fourteen, the median ones more or less irregular; anal segment beset with small macrochætæ and bristles; venter clear light rufous. Legs rufous, more or less silvery, tarsi blackish, hind tibiæ ciliate on outside; claws and pulvilli a little elongate, pulvilli reddish fuscous. Wings grayish hyaline, broadly smoky golden at base; apical cell well opened a little before tip of wing, hind cross-vein sinuate, not quite parallel with internal border of wing; tegulæ whitish, with a slight tawny tinge; halteres pale rufous. Length of body 9 mm.; of wing 9 mm.

Described from one specimen; Maryland? (Lugger).

Jurinia apicifera Wlk.

One from Guanajuato, Mex. (A. Dugès); four from Constantine, Mich., August 28th to September 6th; two from Kansas; one from Colorado (Gillette); one from New Hampshire (C. W. Johnson); one from Maine (F. L. Harvey); one from District of Columbia, October 11th; thirty-one from New York, June 30th to September 1st (Comstock); and one from Ottawa, Canada (Harrington). This gives a rather wide range for this species.

Jurinia smaragdina Mcq.

Four from Pennsylvania (C. W. Johnson); one from Constantine, Mich., August 31st; five from District of Columbia, June 29th to August 19th; and one from Kansas, September.

Jurinia algens Wd.

One from Michigan; seventeen from Brookings, So. Dakota, July 7th to 16th (Aldrich); one from Laramie, Wyo., July 20th, 8000 feet (Niswander); one from Kansas, September; one from Maine (Harvey); one from New Hampshire (Johnson); nineteen from New York, June 30th to September 4th (Comstock); one from On-

tario, September 8th (Comstock); one from Ottawa, Canada (Harrington); and one from Lake Superior (Westcott).

***Jurinia amethystina* Mcq.**

Six specimens from Jamaica, April (C. W. Johnson).

***Jurinia lateralis* Mcq.**

Seventy or eighty specimens from Las Cruces, N. Mex., June 4th to 26th.

***Hystieria aldrichi* n. sp.** ♂.—Eyes brown, thickly hairy; front prominent in profile, about one-fourth width of head at vertex or slightly more, wider before, face about twice as wide; frontal vitta wide, blackish; frontal bristles descending about as low as middle of second antennal joint, vertical bristles strongest, directed backward, next pair nearly vertical, rest directed forward and inward, decussate; one orbital bristle; anterior pair of ocellar bristles strong, directed forward and strongly outward; sides of front, face and cheeks silvery, with a brassy or even golden tinge, the sides of face bare, the cheeks broadly hairy and cinereous on lower portion; facial depression shallow, hardly three-fifths width of face, the facial ridges bare, except a few bristles next vibrissæ; vibrissæ strong, decussate, inserted at constriction of the facial ridges a good distance above oral margin; face a little receding, epistoma prominent; antennæ about two-thirds length of face, nearly black, second joint elongate, third joint hardly longer than second, widened, truncate at tip, apical corners rounded; arista blackish, pale rufous in the middle, thickened half its length, microscopically pubescent, 3-jointed, second joint a little or hardly elongate; proboscis fully as long as height of head, brownish or blackish, stout, labella developed; palpi elongate, slender, hardly thickened toward tip, dark brown, nearly black, bristly, the longest bristles on the underside; occiput cinereous, thickly gray-hairy, with some black bristles along orbital margin. Thorax slightly wider than head, shining black, more or less silvery pollinose, leaving four heavy black vittæ which become indistinct posteriorly; scutellum shining black, somewhat silvery, with an apical strongly decussate pair of macrochaetæ, three stronger lateral pairs, and a weak discal pair. Abdomen somewhat wider than thorax, broadly oval, shining black, more or less silvery pollinose, with something of a dull greenish lustre, first segment hardly shortened but appearing so from above; first segment with several lateral macrochaetæ, second with a lateral pair and a median marginal and discal pair, third with a median discal pair and a marginal row of ten or twelve, anal segment with a medial discal pair and a marginal row becoming submarginal or discal on sides; hypopygium exerted, black, hairy. Legs black, front femora somewhat silvery on outside, femora and tibiae very bristly, especially the latter; claws and pulvilli elongate, claws rufous at base, black toward tip, pulvilli pale tawny yellowish. Wings grayish hyaline, area along wing veins very slightly clouded, with very small costal spine, third vein spined at base; apical cell open, terminating well before tip of wing; fourth vein bent at an angle, without stump or wrinkle, or with a very short stump, apical cross-vein concave; hind cross-vein sinuate, oblique near to bend of fourth vein; tegulae nearly white, halteres dusky, lighter at base.

♀.—Front fully one-third width of head; two orbital bristles; claws and pulvilli less elongate.

Length of body 10—11 mm.; of wing 8—8.5 mm.

Described from five females and two males; Brookings, S. Dakota, August 3d (J. M. Aldrich).

ATROPHARISTA n. gen.

Black, shining species with much the facies of *Jurinia*, though smaller. Belongs in Hystriciinæ. Head nearly rectangular in profile; front very prominent; front of male about one-third width of head, of female considerably more than one-third; frontal bristles weak, not descending below base of antennæ; vertical bristles strongest, directed backward and inward, sometimes slightly decussate, other bristles directed mostly forward, weak and sparse; female with two orbital bristles; face somewhat receding, facial depression moderately deep, epistoma rather prominent; facial ridges bare; sides of face very wide, bare, except some short hairs on upper frontal portions; cheeks very wide, almost as wide as height of eyes, bare except fringe of bristles on lower border; vibrissæ inserted a little above oral margin, but little longer than the bristles below them. Eyes bare. Antennæ considerably shorter than face, second joint elongate, third joint as long, or a little longer than the second, not widened; arista unusually short, not longer than third antennal joint, bare, moderately thickened, distinctly 3-jointed, the second joint slightly elongate. Proboscis about as long as height of head, fleshy, labella developed; palpi well developed, slender, somewhat thickened at tip. Thorax about as wide as head; scutellum with an apical decussate pair of macrochætæ and four lateral pairs, the latter longer than the apical pair. Abdomen wider than thorax, broad oval, first segment somewhat shortened; macrochætæ only marginal; hypopygium of male prominent. Legs moderately stout and bristly; claws and pulvilli of male elongate. Wings about as long as abdomen, without costal spine, third vein not spined at base; apical cell ending before the tip of the wing, open; fourth vein bent at an angle, with or without extremely short stump of a vein at the bend; posterior cross-vein sinuate, nearer the bend of the fourth vein; apical cross-vein almost straight. Type, *A. jurinoides* n. sp.

This genus much resembles a small *Jurinia*, but is at once distinguished by the very short arista, and the linear, not widened, third antennal joint.

Atropharista jurinoides n. sp. ♂.—Eyes dark brown; front blackish, silvery on the sides, the silvery area descending obliquely on the sides of face to the lower margin of the eye, forming a semi-lunar marking in front of the eye;

frontal vitta dark brown or blackish, more than one-third the width of front before, widened posteriorly and split, enclosing the ocelli; face blackish, sides of face below and cheeks blackish or dark brown; antennæ dark brown or blackish, second joint with a few short bristles, arista yellowish brown; proboscis black, except base and tip, which are light brown; palpi dark brown, nearly black, with black bristles, which are long on the under surface; occiput shining black, clothed with black hairs. Thorax and scutellum shining black, with black hairs and bristles; humeri and pleuræ also shining black. Abdomen shining black, clothed with short bristly hairs; first two segments with a lateral macrochèta, but without median ones; third segment with a median marginal pair and a single lateral one; fourth segment fringed with marginal macrochètæ; venter black shining. Legs black, moderately bristly; pulvilli yellowish white. Wings grayish hyaline towards tip and on hind border, but broadly orange yellow at base and on front border; tegulæ orange-yellow, sometimes whitish, except on the border; halteres fuscous.

♀.—Differs as follows: Front and sides of face entirely black, shining, except a narrow silvery streak running from base of antennæ to anterior margin of the eye; front considerably wider, about half as wide again at vertex; claws and pulvilli somewhat elongate, but much shorter than those of the male; apex of abdomen without genital appendages.

Length of body 9–10 mm.; of wing 7–8 mm.

Described from three specimens, two males and one female; Brookings, S. Dakota (J. M. Aldrich).

Echinomyia thomsoni Willist., Trans. Am. Ent. Soc. xiii, 301.

Dr. Williston has suggested this name for *E. filipalpis* Thomson, as the latter name had been used previously by Rondani for a South American species. In the light of recently discovered synonymy, this change is unnecessary, as *E. filipalpis* Rdi. is a synonym of *E. robusta* Wd. (see v. d. Wulp, Biol. C.-A.) I have nineteen specimens from Las Cruces, N. Mex., April 8th—August 31st, and one from Guanajuato, Mex. (A. Dugès). Two of the New Mexico specimens are much smaller than the others, but are evidently the same species. They are 8.5 and 9 mm., both males taken August 31st. My largest specimen is a female, 12.5 mm., taken June 10th. A Californian specimen, July 12th (Harrington), seems to be the same, but the sides of face are much wider.

Echinomyia robusta Wd.

Two from Constantine, Mich., August 23d; one Nebraska, October 20th (Bruner); one Iowa (Osborn); one Carlinville, Ill. (Robertson); one from New Hampshire (Johnson); eleven from New York, May 31st, only one specimen dated (Comstock); and one from Ottawa, Canada (W. H. Harrington).

Echinomyia iterans Wlk.

Two specimens from Constantine, Mich., August 24th—31st; two from Agricultural College, Mich. (Aldrich); twenty-eight from Brookings, S. Dakota, May 27th—July 11th (Aldrich); nine from New York, August 24th, only one specimen dated (Comstock); three from Ontario, September 7th—8th (Comstock); one from Iowa (Osborn); one from Colorado (Gillette); one from Illinois, June (Westcott); and two from Ottawa, Canada (Harrington). Some specimens are very much smaller than others. This is especially noticeable in the S. Dakota specimens, six of which do not exceed 8 mm., and nine more are not over 9 mm.

Echinomyia dakotensis n. sp. ♂.—Eyes brown, frontal vitta dark reddish brown, front about one-fourth width of head at vertex, much wider before, sides of front shining black, more or less silvery pollinose, hairy; face and cheeks yellowish, silvery white pollinose, sides of face hairy, but without bristles; cheeks hairy; vibrissæ inserted well above oral margin; antennæ and arista brown, first two antennal joints pale rufous, second antennal joint longer than the elongate round third, second aristal joint elongate; proboscis decidedly longer than height of head, slim, not fleshy, shining black beyond geniculation, tip tawny; palpi rather long, moderately slender, not thickened at tip, rufous, black bristly; occiput more or less silvery, thickly clothed with yellowish gray hair. Thorax shining metallic black, slightly silvery anteriorly sometimes showing the beginnings of two narrow vittæ, scutellum rather broadly brownish rufous on apical portion. Abdomen black, first segment more or less broadly on sides behind, second broadly on sides, third more broadly on sides, and anal wholly, except a median, more or less abbreviated vitta or marking, clear rufous; first two segments with one or two lateral macrochætæ, and second with a median marginal pair; third with about twenty marginal; anal with a marginal and submarginal row; hypopygium exerted, rufous, black at base, black-hairy. Legs black, femora bristly, tibiæ spiny; claws and pulvilli elongate, claws brownish or rufous, pulvilli yellowish white. Wings grayish hyaline, costal and basal portions golden tawny; apical cross-vein deeply bent in near origin, hind cross-vein rather sinuate, almost parallel with internal border of wing; tegulæ nearly white, with more or less of a yellowish tinge in some lights; halteres tawny. Length of body 11.5—13 mm.; of wing 9—9.5 mm.

Described from three specimens; Brookings, S. Dakota (J. M. Aldrich).

Cuphocera ruficauda v. d. Wulp.

I believe this species is only to be distinguished from *C. macrocera* Wd. by the color of the antennæ. I have one specimen from Pennsylvania (Johnson); one from New York (Comstock); and three from Brookings, S. Dak., June 4th—11th (Aldrich). These have the third antennal joint for the most part blackish. They all have the apical cross-vein concave, and not more or less convex as shown

in v. d. Wulp's figure. In the New York specimen the third and fourth veins have coalesced before the margin of the wing and separated again at the margin, giving the appearance of a very small second apical cell. The Pennsylvania specimen has a slight stump at bend of fourth vein, while the others are entirely without stump, at most with wrinkle.

Cuphocera macrocera Wd.

Two specimens from Portland, Jamaica (C. W. Johnson), I am inclined to regard as this species. The antennæ are wholly light rufous, more or less yellowish on third joint. The fourth vein has a slight stump at bend, and the apical cross-vein is concave.

Gymnochaeta alcedo Loew.

One ♀ specimen from Pennsylvania (C. W. Johnson). The palpi are black at base.

Gonia frontosa Say.

One specimen from Illinois, May (Westcott); one S. Illinois (Robertson); two Nebraska, March–April (Bruner); seven Iowa, all but two April 18th (Osborn); two Minnesota? (Lugger); twenty-five from Brookings, S. Dakota, April 11th–June 11th, *in coitu* April 11th (Aldrich); two from Colorado (Gillette); eleven from Ottawa, Canada, April 19th–20th (Harrington). Many of the S. Dakota males are very small, only 7 mm.

Gonia exul Will.

This species graduates into *G. frontosa*, and is very hard to separate from it in some cases. As nearly as I can decide, I have thirteen specimens: two S. Illinois (Robertson); one Illinois, April (Westcott); one Constantine, Mich., August 22d; one Iowa, April 18th (Osborn); one Minnesota? (Lugger); and seven from Brookings, S. Dakota, May 14th–June 14th (Aldrich).

Gonia sequax Will.

I have thirty-one specimens that I refer to this species, although the claws of the ♂ are nearly or quite as long as last tarsal joint: four from Kansas, June; twenty-six from Las Cruces, N. Mexico, June 3d–September 25th; also one from Orono, Me. (Harvey), which is apparently the same species.

Gonia pallens Wd.

Four specimens from Portland, Jamaica, April–May (C. W. Johnson).

TACHINOMYIA n. gen.

Large, grayish and blackish, sometimes reddish species, considerably resembling *Tachina*. Belongs in Tachininae. Head nearly rectangular; front projecting, about one-third width of head, frontal bristles descending below base of third antennal joint; vertical bristles a little strongest, and, with next two pairs, directed backward, others forward and inward, more or less decussate; no orbital bristles in male; face somewhat receding, epistoma somewhat prominent; facial ridges bristly not more than half way to base of antennæ; sides of face wide, bare; cheeks almost as wide as one-half the eye height, with black hairs on lower portion and bristles on lower border; vibrissæ inserted considerably above the oral margin; eyes bare; antennæ shorter than the face, second joint somewhat elongate, third joint about twice the length of the second; arista indistinctly 3-jointed, microscopically pubescent, thickened on basal third, second joint hardly longer than wide; proboscis short, not longer than height of head, fleshy, with well-developed labellæ; palpi well developed, club shaped, somewhat thickened toward apex. Thorax same width as head; scutellum with an apical decussate pair of weak macrochætæ, and four lateral macrochætæ on each side. Abdomen elongate-conical, strongly vaulted, first segment not shortened, macrochætæ marginal; hypopygium much produced. Legs rather stout, bristly; claws and pulvilli of male very elongate. Wings longer than abdomen, rather narrow, without or with very small costal spine, third vein with several spines at base; apical cell ending far above tip of wing, open; fourth vein bent nearly at a right angle, without stump of vein, at most with a very slight wrinkle, apical cross-vein strongly or slightly concave; posterior cross-vein more or less sinuate, terminating nearer to the bend of the fourth vein. Type, *T. robusta* n. sp.

This genus differs from *Tachina* in the peculiar elongate form of the abdomen, and the very prominent hypopygium; also by the vibrissæ being inserted at a considerable distance above the oral margin.

Tachinomyia robusta n. sp. ♂.—Eyes brown, front silvery with golden lustre, frontal vitta dark brown or blackish, more than one-third width of front, split behind on each side of the ocelli; face silvery, sides of face with a golden lustre, cheeks silvery; antennæ dark brown or blackish, first two joints and base of third more or less reddish, second joint bristly, arista blackish; proboscis dark brown or black, palpi reddish yellow, covered with black bristles; occiput cinereous, covered with long gray hairs, except bare space below vertex, fringed with black bristles. Thorax cinereous with four nearly parallel, very narrow,

more or less interrupted black vittæ, covered with hairs and long bristles; scutellum testaceous, darker at base. Abdomen black, segments two to four broadly silvery at base, especially fourth segment, the black with a golden brownish reflection; first and second segments with a median marginal and a lateral pair of macrochætæ; third segment with six or eight marginal macrochætæ; fourth segment armed with marginal and submarginal macrochætæ; the whole abdomen clothed with rather long hairs, especially the hypopygium; venter more or less silvery. Legs black, somewhat silvery, especially the front femora, the tibiæ furnished with spiny bristles; pulvilli yellowish white. Wings grayish hyaline, slightly yellowish at base; tegulæ white, borders slightly yellowish; at base; tegulæ white, borders slightly yellowish; halteres fuscous. Length of body about 11—13 mm.; of wing 9.5—11 mm.

Described from seven specimens; Michigan, South Dakota.

Tachinomyia floridensis n. sp. ♂.—Eyes and frontal vitta light brown; sides of front, face and cheeks, silvery gray; vertex and front with a slight brassy tinge; anterior pair of ocellar bristles strongest, directed forward and strongly outward; antennæ brownish black, the first two joints dark rufous, proboscis brownish, palpi very long and bristly, reddish yellow, occiput silvery cinereous, very thickly clothed with long yellowish gray hair. Thorax blackish, more or less silvery-cinereous pollinose, with four heavy blackish vittæ, the outer ones interrupted at the suture, the inner ones appearing double; scutellum orange-rufous, blackish at base. Abdomen dark rufous, very hairy and bristly, discal portion of first to third segments blackish, the first segment broadly and the third narrowly so, bases of second and third segments narrowly and base of fourth widely silvery; first and second segments with one or two lateral macrochætæ and a median marginal pair, third with eight or ten marginal, and anal with a thick row of marginal interspersed with long hairs and a submarginal pair; hypopygium dark rufous, thickly hairy. Legs black, knees pale rufous, front femora silvery on outside, femora hairy and bristly, tibiæ with macrochætæ; claws and pulvilli very long, claws brownish, pulvilli brownish yellow. Wings grayish hyaline, slightly pale tawny at base; tegulæ nearly white, halteres brownish rufous. Length of body fully 16 mm.; of wing 13 mm.

Described from one specimen; Florida (C. W. Johnson).

DÆOCHAETA n. gen.

Moderately small black species, with abdominal segments silvery at base. Belongs in Tachininae. Head rather triangular in profile; front prominent, front (♀?) fully one-third width of head at vertex, wider in front, face slightly wider, about one-half width of head; frontal bristles in a single row, descending below base of third antennal joint, some bristly hairs outside them, three posterior bristles of each row strongest and directed backward; no orbital bristles. Face receding, epistoma not prominent; facial depression occupying nearly whole width of face, fully four-fifths, rather oval in outline, wider below, moderately deep; facial ridges bristly about half way

up, considerably constricted below; sides of face narrow, bare; cheeks about one-fourth eye-height, short, more or less bristly on lower portions; vibrissæ strong, inserted almost on oral margin. Eyes bare, descending about five-sixths as low as oral margin. Antennæ about as long as face, inserted high, second joint rather short, third about five times as long as second, moderately wide, of equal width, posterior apical corner rounded; arista rather long, nearly bare, thickened on basal two-fifths, 3-jointed, the second joint strongly elongate, more than one-half as long as thickened portion of last joint. Proboscis short, fleshy, shorter than height of head, labella well developed; palpi rather slender, moderately thickened toward tip. Thorax somewhat narrower than head; scutellum with an apical non-decussate pair of macrochætæ reaching middle of second abdominal segment, and two long lateral pairs. Abdomen not wider than thorax, rather long oval, somewhat vaulted, first segment hardly shortened; macrochætæ marginal, strong discal bristles often present. Legs of moderate length, somewhat bristly, especially middle and hind tibiæ; claws and pulvilli short (♀?). Wings a little longer than abdomen, with small costal spine, third vein bristly at base; apical cell terminating considerably before tip of wing, open; fourth vein bent at an angle, with a short wrinkle at bend, apical cross-vein strongly concave; hind cross-vein more or less curved, in middle between small cross-vein and bend of fourth. Type, *D. harveyi* n. sp.

Dæochæta harveyi n. sp. ♀(?).—Eyes brown, frontal vitta blackish; sides of front, face and cheeks silvery, in some lights dark; anterior pair of ocellar bristles strongest, directed forward; antennæ and arista black, second antennal joint only a little bristly; proboscis dark brown or blackish, palpi blackish; occiput blackish, clothed with gray hairs, and with fringe of black hairs on orbital margins. Thorax black, silvery pollinose, leaving four black vittæ, which become obsolete at transverse suture; scutellum black, somewhat silvery at apex. Abdomen shining black, bases of segments two to four rather broadly silvery pollinose; first two segments with a lateral and a median marginal pair of macrochætæ, third segment with about ten marginal, anal segment armed with macrochætæ and bristles, which are not very strong. Legs black, femora and tibiæ bristly; pulvilli fuscous. Wings grayish hyaline, very slightly pale tawny at base; tegulæ watery white, borders slightly tawny; halteres blackish. Length of body $5\frac{1}{2}$ mm.; of wing 4.5 mm.

Described from one specimen; Orono, Me. (F. L. Harvey)

EUMACRONYCHIA n. gen.

Moderate sized to smaller, elongate species, silvery with black-banded abdomen. Belongs in Tachininae. Head quadrilateral in profile, the front sloping and longer than oral profile; front rather

prominent, one-third or more width of head in ♂, and about three-eighths in ♀, slightly narrowed anteriorly, face about one-half wider; frontal bristles in a single row, descending only to base of antennæ, all about equal, except two vertical bristles, which are strongest and directed backward, the rest mostly directed inward and decussate; three orbital bristles in ♂ and ♀, the posterior one directed backward. Face receding, epistoma somewhat prominent; facial depression about two-fifths width of face, a little widened below, more or less elongate-oval in outline, moderately deep; facial ridges bare, except two or three bristles above vibrissæ, a little constricted considerably above oral margin; sides of face wide, bare or clothed with microscopic bristles; cheeks wide, fully one-third eye-high, bare except bristles on lower border and fine hairs posteriorly; vibrissæ not long, moderately stout, decussate, inserted well above oral margin. Eyes bare, descending about four-fifths as low as oral margin. Antennæ much shorter than face, inserted hardly above line through middle of eyes, first joint short, second a little elongate, bristly, third from two and one-half (♀) to three (♂) times as long as second, rather narrow, posterior apical corner rounded; arista moderately long, microscopically pubescent, thickened fully half its length, 3-jointed, first two joints short. Proboscis little more than half as long as height of head, moderately stout, labella well developed; palpi rather slender, somewhat thickened at tip, more or less curved, bristly. Thorax usually a little narrower than head; scutellum with a very short, decussate apical pair of macrochætæ; a long subapical pair reaching to middle of second abdominal segment, and a shorter lateral pair. Abdomen not wider than thorax, rather elongate-conical, somewhat vaulted (♂), first segment not shortened; macrochætæ only marginal; hypopygium of ♂ exerted. Legs moderately short, not very bristly, femora stout, especially in ♂; claws and pulvilli of ♂ elongate, of ♀ rather short. Wings about as long as abdomen, without costal spine, third vein spined part way to small cross-vein; apical cell opening on front border of wing a good distance before tip; fourth vein bent at an acute or right angle, with a more or less distinct wrinkle at bend, apical cross-vein strongly bent in; hind cross-vein oblique, not straight, nearer to bend of fourth vein. Type, *E. decens* n. sp.

Eumacronychia decens n. sp. ♂.—Eyes dark brown; front, face, sides of face and cheeks silvery white, frontal vitta, about half width of front, pale brownish yellow; front pair of ocellar bristles longest, directed forward and

outward; antennæ clear rufous, second joint beset with short black bristles in front, arista black; proboscis blackish, palpi pale rufous, bristly toward tip; occiput cinereous, clothed with short black hairs, with a fringe of black hairs on border. Thorax silvery, with three well-developed moderately narrow black vittæ extending to scutellum, the median vitta with a narrow lateral one on each side extending to the suture; scutellum silvery; thorax and disc of scutellum with few macrochætæ, but clothed with short black bristles; humeri and pleuræ silvery-white. Abdomen shining black, the basal half or more of second and third segments pronounced silvery white; first segment also silvery-white at base, sometimes wholly silvery-white, except the upper posterior border; anal segment deep rufous, silvery-white at base; hypopygium deep rufous; first segment with a lateral pair of macrochætæ, second and third segments with a lateral and a median marginal pair; anal segment with about ten marginal macrochætæ. Legs black, femora and tibia more or less silvery on outer portions; claws and pulvilli very long, pulvilli smoky-white. Wings grayish hyaline, slightly tawny at extreme base; tegulæ almost pure white, halteres whitish.

♀.—Differs as follows: Front much broader; anus appearing as an additional segment, with a row of marginal macrochætæ, the whole deep rufous; claws and pulvilli short.

Length of body, 5.5–8.5 mm.; of wing, 4–6 mm.

Described from ten specimens, four males and six females, Las Cruces, N. Mex., January 2d to July 28th; also two females, California (Coquillett); and one female, California, April 9th (W. H. Harrington).

Eumacronychia elita n. sp. ♂.—Eyes dark brown; frontal vitta pale tawny yellow; sides of front, face and cheeks pure silvery white, anterior pair of ocellar bristles strongest, directed forward and strongly outward; antennæ brownish, first two joints rufous, second joint with a strong bristle on front edge; arista blackish, thickened three-fifths its length, curved; proboscis blackish, palpi yellow, tinged with rufous; occiput silvery, sparsely black-bristly. Thorax silvery white, with three blackish vittæ, the middle one narrow and indistinct, becoming lost near suture, the outer ones heavier and reaching scutellum; scutellum silvery-white. Abdomen black, bases of segments two to four very broadly silvery-white pollinose, first segment slightly so on sides; first segment with a lateral macrochæta, second with a lateral one and a median marginal pair, third and anal segments each with a lateral and a median marginal pair; hypopygium blackish. Legs black, front femora silvery-white on outside, femora and middle and hind tibiæ bristly; pulvilli very long, yellowish white, claws short, concolorous. Wings grayish hyaline, tegulæ pure white, halteres dusky. Length of body, 4.5 mm.; of wing, 3.5 mm.

Described from one specimen; Las Cruces, N. Mex., July 7th.

SARCOMACRONYCHIA n. gen.

Medium sized to small, rather elongate species, grayish, with vitate thorax and rufous anus, bearing a striking resemblance to Sarcophagidæ, but easily distinguished by the bare arista. Belongs in Tachininæ. Head more or less hemispherical; front somewhat

prominent, about three-tenths width of head in ♂, of equal width, face widening to half again as broad; frontal bristles in two rows, the outer row shorter and weaker, the two inner rows closely approximated and decussate, not descending below base of antennæ, all about equal except two vertical bristles, which are much stronger and directed backward; no orbital bristles in ♂. Face nearly perpendicular, epistoma somewhat prominent; facial depression short, about two-fifths width of face, more or less oval in outline; rather shallow; facial ridges bare, except a few bristles above vibrissæ not extending half way up, constricted well above oral margin; sides of face wide, bare; cheeks less than one-fourth eye-height, bare except bristles on lower border and some hairs posteriorly; vibrissæ rather short, but moderately stout, decussate, inserted high above oral margin. Eyes bare, descending below vibrissæ, almost on a level with oral margin. Antennæ short, reaching little more than half way to epistoma, inserted about on line drawn through middle of eyes, first joint short, second elongate and bristly, third not much longer than second; arista not long, bare, thickened on basal third or more, 3-jointed, the second joint not elongate. Proboscis from one-fourth shorter than to nearly as long as height of head, rather slim, labella developed; palpi slender, nearly filiform, curved. Thorax not wider than head; scutellum with a decussate apical pair of macrochætæ reaching to base of second abdominal segment, a posterior lateral pair reaching as far, and a shorter anterior lateral pair. Abdomen elongate-oval, hardly as wide as thorax, first segment not shortened, macrochætæ moderately strong, only marginal, hypopygium of ♂ more or less exerted. Legs moderately long, not stout, not very bristly; pulvilli and claws of ♂ elongate. Wings longer than abdomen, without costal spine, third vein bristly at base; apical cell opened well before tip of wing; fourth vein bent at nearly a right angle, with a well-defined wrinkle at bend, apical cross-vein bent in; hind cross-vein more or less sinuate, very oblique, nearer to bend of fourth. Type, *S. unica* n. sp.

Sarcomacronychia unica n. sp. ♂.—Eyes brown, front silvery cinereous, frontal vitta appearing as a narrow black line, which widens behind enclosing the ocelli; face, sides of face and cheeks silvery, with a dark reflection in some lights; antennæ and arista black, second antennal joint very bristly and with a long bristle on front edge; proboscis black or brownish; palpi rufous, apical portion blackish, with some fine bristles on underside; occiput cinereous, except black area below vertex, clothed with black hairs, fringed with short black bristles. Thorax silvery, with three broad, quite well-defined, black vittæ

extending to scutellum; scutellum cinereous, discal portion darker, humeri and pleuræ silvery. Abdomen blackish, more or less faintly shaded with silvery, anal segment entirely rufous, first and second segments with a median marginal pair and several lateral and ventral marginal macrochætæ; third and fourth segments with a marginal row of macrochætæ. Legs black, femora and tibia more or less silvery on outer surface; claws and pulvilli elongate, the pulvilli fuscous. Wings grayish hyaline, tegulæ nearly white, halteres pale tawny. Length of body 8 mm.; of wing $6\frac{1}{4}$ mm.

Described from one specimen; Las Cruces, N. Mex., May 30th.

TRIXOCLISTA n. gen.

Moderately large, rather elongate, cinereous species, having much the facies of Sarcophagidæ, and with some of the characteristics of *Trixa*. Belongs in Tachininæ. Head somewhat irregularly quadrilateral in profile, the facial profile less than one-half the occipital; front rather prominent, about one-sixth width of head on vertical half in ♂, three times as wide at base of antennæ, face widening to four-fifths width of head or more below; frontal bristles comparatively weak, all about equal, in a single row, not descending below base of antennæ, interspersed with shorter bristles which cover the whole sides of front anteriorly; vertical and next bristle directed weakly backward, rest inward; no orbital bristles (♂). Face perpendicular, epistoma not prominent (the facial ridges seen in profile are concave, and the vibrissal angles swollen or prominent); facial depression not much more than one-third width of face, shortened, somewhat oval in outline, shallow, with a median longitudinal swell; facial ridges bristly not more than one-third way up, well constricted above oral margin; sides of face very wide, rather short, clothed with bristles disposed in four longitudinal rows, obliquely cut off below; cheeks very wide, more than one-half eye-height, bare anteriorly on furrowed portion, bristly behind with bristles on lower border; vibrissæ strongly decussate, inserted well above oral margin. Eyes bare, descending obliquely about two-thirds way to oral margin. Antennæ inserted about on line drawn through middle of eyes, short, extending little more than half way to oral margin, first joint short, second a little elongate, third one and one-half times as long as second, straight on front edge, rounded posteriorly; arista rather long, short pubescent on thickened basal fourth, distinctly 3-jointed, second joint a little longer than wide. Proboscis short, not much over one-half height of head, fleshy, labella well developed; palpi as long as proboscis below geniculation, reaching epistoma, rather

slender, not thickened at tip, quite bristly. Thorax same width as head; scutellum with an apical decussate pair of macrochætæ reaching nearly to base of third abdominal segment, and three lateral and a discal pair of weaker ones. Abdomen as wide as thorax, elongate-oval, first segment not shortened, macrochætæ only marginal; hypopygium exserted, basal segments bearing macrochætæ. Legs rather long, moderately stout, somewhat bristly, metatarsi about one-half as long as following joints together; claws and pulvilli of male elongate. Wings longer than abdomen, with small costal spine, third vein bristly at base; apical cell opened a little before tip of wing; fourth vein bent at an obtuse angle, with a very slight wrinkle at bend, apical cross-vein bowed in, hind cross-vein sinuate, much nearer to bend of fourth vein. Type, *T. distincta* n. sp.

Trioxelista distincta n. sp. ♂.—Eyes light brown, frontal vitta blackish, sides of front, face and cheeks black, lightly silvery pollinose, hardly showing in some lights; antennæ and arista brown, first two antennal joints slightly rufous; proboscis black, palpi brownish yellow, black-bristly; occiput cinereous, black-hairy. Thorax and scutellum silvery, with three heavy black vittæ, the median one continued on to the scutellum, the outer ones reaching scutellum. Abdomen blackish, silvery pollinose, leaving a median vitta and a lateral triangular marking of black on segments one to three, first segment with a lateral pair of macrochætæ, second with a lateral pair and a median marginal pair, third with about twelve marginal, and anal with about ten marginal macrochætæ, the whole abdomen also with long bristly hairs. Legs black, femora and tibiæ somewhat bristly; claws and pulvilli elongate, the pulvilli rather broad, yellowish smoky. Wings grayish hyaline, slightly pale tawny at base, tegulæ pearl whitish, with a slight tawny tinge, halteres brownish, lighter at base. Length of body 9 mm.; of wing 7.5 mm.

Described from one specimen; Carlinville, Ill. (Chas. Robertson)

LACHNOMMA n. gen.

Medium sized to rather small, cinereous and blackish species, with considerably the facies of *Atrophopoda* and *Vanderwulpia*, but readily distinguished from these by the thickly hairy eyes and the character of the front claws and pulvilli, and considerably approaching *Hyptertrophocera* in the character of the antennæ. Belongs in the Tachininæ. Head triangular in profile, the oral profile short, front less than one-third width of head at vertex in ♂, fully one-third in ♀, much wider before in both sexes, face about three-fifths width of head, frontal bristles in a single row descending on sides of face as low or lower than lower border of eyes, stout, the strongest and longest being the vertical and the lowest descending bristles, the vertical and next pair directed backward, the descending bristles

directed downward and more or less backward, bristly hairs outside frontal bristles, sometimes in distinct rows; one orbital bristle in ♀, none in ♂. Face receding, epistoma prominent; facial depression three-fifths or less width of face, wider below, of moderate depth, with a more or less distinct median carina, facial ridges bare, except a few bristles next vibrissæ, constricted below; sides of face moderately wide, nearly bare, except the descending frontal bristles; cheeks short, but wide, nearly or about one-half eye-height, hairy posteriorly and with bristles on lower border; vibrissæ rather strong, decussate, inserted almost on oral margin. Eyes distinctly and moderately thickly pubescent, descending over two-thirds as low as oral margin. Antennæ inserted on or above a line drawn through middle of eyes, fully or nearly as long as face, very elongate and large or only moderately so, first and second joints rather short, third joint five or six times as long as second; arista moderately long, more or less curved, microscopically pubescent, thickened more than one-half its length, 3-jointed, second joint short. Proboscis as long as height of head or less, rather stout, fleshy, labella well developed; palpi moderately long, slender, more or less thickened at tip. Thorax about as wide as head; scutellum with an apical decussate pair of macrochætæ, a stronger lateral pair next these extending about to base of third abdominal segment, another lateral and a weak discal pair. Abdomen more or less ovoconical, not wider than thorax, first segment hardly shortened; macrochætæ only marginal, unless on anal segment; hypopygium of ♂ rather concealed. Legs of moderate length, rather bristly; claws and pulvilli of ♂ somewhat elongate, of ♀ shorter. Wings a little longer than abdomen, with costal spine, third vein spined about to small cross-vein; apical cell moderately long petiolate, short petiolate, or closed in margin, terminating well before tip of wing; fourth vein bent at an angle, with or without a very slight wrinkle at bend, apical cross-vein more or less concave; hind cross-vein sinuate or nearly straight, nearer to bend of fourth vein. Type, *L. magnicornis* n. sp.

***Lachnomma magnicornis* n. sp. ♂.**—Eyes dark brown, frontal vitta nearly black, sides of front, face and cheeks silvery white, darker in some lights; anterior pair of ocellar bristles strongest, directed anteriorly; antennæ and arista black; proboscis dark brown, palpi pale yellowish; occiput cinereous, thickly gray-hairy on lower half, fringed with black hairs on orbital margins. Thorax silvery, with two black vittæ extending about to scutellum; scutellum silvery. Abdomen black, second to fourth segments rather broadly silvery white at base; first segment with a lateral macrochæta, second with a lateral one and a median marginal pair, third with a lateral pair and a strong median marginal

pair, anal with a row of marginal macrochætæ. Legs black, femora and tibiæ somewhat bristly; pulvilli dirty whitish. Wings grayish hyaline, slightly pale tawny at extreme base, apical cell moderately long petiolate, apical cross-vein, concave, a slight fuscous spot at bend of fourth vein; tegulæ nearly white, halteres dusky. Length of body nearly 7 mm.; of wing 4.5 mm.

Described from one specimen; Las Cruces, N. Mex., October 10th.

NEOTRACTOCERA n. gen.

Grayish and brownish species of medium size, with much the facies of *Hypertrophocera*, but readily distinguished by the much smaller, very narrowed, elongate and linear third antennal joint. Belongs in the Tachininæ. Head rather triangular in profile, the facial profile very long, the oral very short; front quite prominent, about one-half width of head in ♀, wider before than at vertex, face widened, hardly three-fifths width of head; frontal bristles in a double row (the outer row being composed mostly of orbital bristles), short and about equal, except vertical bristles which are strong and directed backward, descending in a single row on sides of face as low as lower border of eyes; three or more orbital bristles in ♀. Face very long and receding, epistoma not prominent; facial depression rather less than one-half width of face, elongate, a little widened below, rather deep; facial ridges bare, except a few bristles next vibrissæ, a little constricted below; sides of face wide and long, bare outside the frontal bristles; cheeks wide, about one-half eye-height, hairy behind and bristly on lower border; vibrissæ moderately strong, decussate, inserted about on oral margin. Eyes bare, descending about three-fourths as low as oral margin. Antennæ much shorter than face, inserted high, first joint short, second hardly elongate, third about five times as long as second, very narrow, elongate, linear, but somewhat widened at base; arista rather long, curved toward tip, bare, thickened whole length, 3-jointed, second joint short. Proboscis short, not much longer than one-half height of head, somewhat stout, labella well developed; palpi very slender, nearly filiform, slightly thickened at tip, reaching to tip of proboscis when latter is bent forward. Thorax as wide as head; scutellum with an apical, non-decussate pair of macrochætæ hardly exceeding base of second abdominal segment, a sublateral, and a weaker discal pair. Abdomen wider than thorax, broadly ovate, or nearly round in outline, more or less flattened, first segment not shortened; macrochætæ marginal and discal, at least on last segment. Legs moderately long, a little bristly; claws and pulvilli of ♀ short. Wings longer than abdomen, broad, with small

costal spine, third vein bristly at base; apical cell closed in margin well before tip of wing; fourth vein bent at an obtuse angle, without stump or wrinkle, or exceptionally with a slight stump, apical cross-vein concave; hind cross-vein sinuate, considerably nearer to bend of fourth vein. Type, *N. anomala* n. sp.

Neotractocera anomala n. sp. ♀.—Eyes dark brown, frontal vitta light brown, sides of front, face and cheeks silvery, præ-genal area reddish brown; four pairs of ocellar bristles, the anterior pair strongest, directed forward and outward; antennæ brownish yellowish, arista nearly black, second antennal joint with a pair of strong bristles on front edge; proboscis dark brown, labella tawny, palpi pale yellow, black-bristly; occiput cinereous or silvery, black-hairy. Thorax silvery, with three well-defined blackish vittæ, the outer ones reaching scutellum; scutellum brownish yellow, silvery pollinose. Abdomen yellowish brown, silvery pollinose, with a broad black median vitta extending from base of first segment to tip of anal segment; first segment at most with some lateral bristles, second with one or two lateral macrochètæ and a median marginal pair, third with about ten marginal, and anal with about eight marginal and ten discal macrochètæ. Legs blackish, tibiæ and extremities of femora more brownish yellow, femora silvery, femora and tibiæ bristly; pulvilli small, whitish. Wings grayish hyaline, tegulæ nearly white, halteres brownish yellow, knobs whitish. Length of body 7.5–8 mm.; of wing 6–6.5 mm.

Described from two specimens; Las Cruces, N. Mex., July 28th and September 21st.

EUTHYPROSOPA n. gen.

Very similar to *Neotractocera*, and differs only as follows: Front (♀) rather more than one-half width of head, face fully three-fifths width of head; facial depression very narrow, hardly or about one-third width of face, of nearly equal width throughout, with a distinct median carina, moderately deep, very elongate; facial ridges almost parallel, bare, but slightly constricted below; sides of face wider, with some bristles above outside frontal row; cheeks very wide, fully two-thirds of eye-height. Antennæ little more than half the length of face, the third joint about four times as long as second, very much more narrowed, pointed at apex, peg-shaped; arista 3-jointed, curved, second joint somewhat elongate. Proboscis still shorter, not as stout, palpi very small, short, thickened at tip. Abdomen not much wider than thorax, oval in outline, not flattened. Wings longer than abdomen, only moderately broad, with costal spine; apical cell petiolate, terminating well before tip of wing, apical cross-vein straight; fourth vein curved or bent, hind cross-vein about in middle (if curved), or slightly nearer bend of fourth (if bent). Type, *E. petiolata* n. sp.

Euthyprosopa petiolata n. sp. ♀.—Eyes very dark brown, frontal vitta reddish brown, sides of front silvery with a slight brassy tinge, sides of face and facial depression silvery white, facial ridges brownish yellow; cheeks mostly brown, somewhat silvery; anterior pair of ocellar bristles strongest, directed forward and strongly outward; antennæ brownish yellow, second joint with a pair of bristles on front edge, arista dark brown; proboscis brownish, labella reddish brown, palpi pale yellowish; occiput silvery, black-bristly. Thorax silvery cinereous, with a median pair of darker vittæ, which become obsolete near the transverse suture; scutellum brownish yellow, silvery pollinose. Abdomen silvery cinereous, the posterior margins of segments brownish gray; first and second segments with a lateral macrochaeta, the second also with a median marginal pair, third with about eight marginal, anal with about eight marginal, and six discal macrochaetæ. Legs brownish yellow, the femora blackish basally, tarsi black, femora and tibiæ bristly; pulvilli very small, whitish. Wings grayish hyaline, tegulae white, halteres yellowish brown. Length of body 6.5–7 mm.; of wing 5–5.5 mm.

Described from four specimens; Las Cruces, N. Mex., September 17th to 30th.

PSEUDATRACTOCERA n. gen.

Medium sized to small species, with somewhat the facies of *Neotractocera*, more so of *Euthyprosopa*. Differs from *Neotractocera* as follows: Head quadrilateral in profile, facial and frontal profiles more nearly equal; front only a little prominent, in ♂ about one-fourth width of head at vertex and one-third before, in ♀ about one-third at vertex; frontal bristles in a single row descending only to base of third antennal joint, decussate, vertical bristles a little longer; two orbital bristles in ♀, none in ♂. Face shorter, receding, epistoma not prominent, facial depression one-half or more width of face, wider below, elongate-oval in outline, not deep, with a median carina, which becomes obsolete below; facial ridges bare, except some bristles above vibrissæ, but little constricted below, sides of face rather wide, or only moderately so, bare; cheeks somewhat less than one-half eye-height, bristly below and posteriorly; vibrissæ rather strong, decussate, inserted somewhat above oral margin. Antennæ much shorter than face, second joint quite elongate, third a little more than twice as long as second, very narrow, rather pointed at tip; arista thickened on basal third or fourth, rather bulbous, bare, 3-jointed, second joint short. Proboscis short, palpi slender, slightly thickened at tip; scutellum with an apical, more or less decussate pair of macrochaetæ rather exceeding middle of second abdominal segment, three lateral and a weak discal pair. Abdomen hardly wider than thorax, oval, first segment hardly shortened; claws and pulvilli of ♂ elongate, of ♀ considerably shorter. Wings

longer than abdomen, with very small costal spine; apical cell closed in margin well before tip of wing, or exceptionally very short petio-late, apical cross-vein nearly straight or a little bowed, fourth vein bent at a curve; hind cross-vein moderately or strikingly sinuate, a little nearer to bend of fourth vein, or nearly in middle. Type, *P. neomexicana* n. sp.

Pseudatractocera neomexicana n. sp. ♂.—Eyes dark brown, frontal vitta brown, sides of front, face and cheeks silvery white, præ-genal area brown in some lights; anterior pair of ocellar bristles strongest, directed forward; antennæ light reddish yellow, third joint brown, arista light brownish; proboscis brownish, palpi brownish yellow, with some black bristles on under-side; occiput cinereous, gray-hairy below, fringed with black hairs on orbital margins. Thorax silvery cinereous, with four narrow black vittæ not reaching scutellum; scutellum silvery cinereous. Abdomen silvery cinereous, certain portions, especially base of first segment and posterior margins of others, blackish in some lights; first segment with lateral bristles, second with a lateral macrochaeta and a median marginal pair, third with ten or more marginal, and anal with marginal and submarginal macrochaetae. Legs black, femora and tibiae bristly, femora slightly silvery on outer portions; pulvilli dirty whitish, foot-claws and pulvilli long. Wings grayish hyaline, apical cell closed in margin; tegulae whitish, halteres yellowish.

♀.—Front wider, two orbital bristles; claws shorter.

Length of body 5–6.5 mm.; of wing 4.5–6 mm.

Described from seven males and one female (♀ gave smallest measurement); Las Cruces, N. Mex. Males all taken June 2d, the female September 23d.

GYMNOPROSOPA n. gen.

Small blackish species, with thorax and bases of abdominal segments silvery. Belongs in Tachininæ. Head more or less triangular in profile, oral profile rather short; front prominent, in ♂ hardly one-third width of head, in ♀ very distinctly more than one-third, face nearly same width as front in female wider than front in ♂; frontal bristles not descending below base of antennæ, vertical bristles longest, and, with next two pairs, directed backward, others usually inward and decussate; two orbital bristles in both sexes. Face receding, epistoma somewhat prominent; facial depression more than one-third width of face in ♀, about one-half in ♂, only a little wider below, moderately deep; facial ridges bare, or with only one or two minute bristles next vibrissæ, constricted below; sides of face moderately wide, wider in ♀ than in ♂, bare; cheeks fully or nearly one-third eye-height, bare, hardly any or only very small bristles on lower margin; vibrissæ moderately strong, decussate, inserted on oral

margin. Eyes bare, descending three-fourths or more as low as oral margin. Antennæ nearly as long as face, second joint slightly or hardly elongate, third two and one-half to four times as long as second; arista not long, thickened more than half its length, bare, indistinctly 3-jointed, second joint short. Proboscis rather shorter than height of head, not stout, labella developed; palpi rather slender, thickened at tip. Thorax narrower than head; scutellum with an apical strongly decussate pair of macrochaetæ and two lateral pairs. Abdomen elongate oval, not wider than thorax, first segment shortened; macrochaetæ only marginal; hypopygium concealed. Legs slightly bristly; claws and pulvilli short in both sexes. Wings about as long as abdomen, with a pair of costal spines or a single small one, third vein bristly at base; apical cell ending before tip of wing, closed in margin; fourth vein bent at an angle, with or without a wrinkle at bend, apical cross-vein strongly concave; hind cross-vein nearly straight, a little nearer to bend of fourth vein. Type, *G. polita* n. sp.

Gymnoprosope polita n. sp. ♀.—Eyes brown, frontal vitta brownish orange, sides of front, face and cheeks pure silvery white; anterior pair of ocellar bristles strongest, directed forward and outward; antennæ and arista blackish, first two antennal joints more or less rufous, second somewhat elongate and with a bristle on front edge, third hardly three times as long as second; proboscis black, palpi yellow; occiput cinereous, sparsely short black-bristly. Thorax silvery, with three blackish vittæ, the outer ones heavy, the middle one narrow, all reaching about to scutellum; scutellum silvery. Abdomen deep shining black, segments two to four silvery white at base; first segment without macrochaetæ, second with a lateral one and a median marginal pair, third and fourth each with a marginal row of eight or more macrochaetæ. Legs black, femora and tibiæ bristly, front femora silvery on outside; pulvilli small, whitish. Wings smoky-hyaline, more infuscated on costal portion, with a pair of costal spines, fourth vein with a wrinkle at bend; tegulæ pure white, halteres brownish yellow. Length of body 4.5 mm.; of wing 3.5 mm.

Described from one specimen; So. Florida (Chas. Robertson).

Gymnoprosope argentifrons n. sp. ♂.—Differs as follows from *G. polita*: Front, face and cheeks, including frontal vitta, all silvery white, the vitta in some lights having a slightly different shade; antennæ entirely blackish, second joint hardly at all rufous, third joint about four times as long as second; vittæ and macrochaetæ about same; claws and pulvilli slightly elongate, hypopygium black. Wings with only one costal spine, distinctly infuscated, fourth vein without wrinkle at bend, but perhaps with a very slight stump; tegulæ white, halteres pale yellowish. Length of body 4 mm.; of wing nearly 3 mm.

Described from one specimen; So. Florida (Chas. Robertson).

Gymnoprosope clarifrons n. sp. ♂.—Differs as follows from *G. polita*: Frontal vitta orange-yellow, slightly silvery pollinose; antennæ blackish, second

joint more or less rufous, third joint more than three times as long as second; vittæ and macrochætæ same; claws and pulvilli short. Wings with one costal spine, the costo-apical region yellowish infuscated, fourth vein with distinct wrinkle at bend; tegulæ nearly white, or slightly yellowish on border, halteres pale tawny, knobs whitish. Length of body 4.5 mm.; of wing 3 mm.

Described from one specimen; Carlinville, Ill. (Chas. Robertson).

SARCOTACHINELLA n. gen.

Black and grayish, more or less shining species of rather small size, with the habitus of the Sarcophagidæ. Belongs in Tachininae. Head quadrilateral in profile, the frontal outline sloping; front a little prominent, about two-sevenths width of head in ♂, a little wider at vertex and before, face twice as wide as widest part of front; frontal bristles in a single row descending about as low as base of third antennal joint, vertical bristles strongest and directed strongly backward, next two bristles also directed backward, the rest inward; no orbital bristles in ♂. Face nearly perpendicular, epistoma somewhat prominent; facial depression three-fifths width of face, wider below, more or less triangular in outline, rather shallow; facial ridges bare, except a few bristles above vibrissæ, well constricted below; sides of face moderately wide, with a few bristles below near orbital margin; cheeks moderately wide, fully one-third of eye-height, somewhat hairy posteriorly, with a row of bristles on lower border; vibrissæ moderately strong, decussate, inserted on oral margin. Eyes bare, descending fully three-fourths as low as oral margin. Antennæ shorter than face, second joint rather elongate, third joint hardly one and one-half times as long as second, moderately wide, posterior apical corner rounded; arista moderately long, thickened on basal third, rather long pubescent on thickened portion, apparently 3-jointed, basal joints short. Proboscis about as long as height of head, stout, labella rather large; palpi well developed, club-shaped, considerably thickened toward tip. Thorax about as wide as head; scutellum with a weak, apical, strongly decussate pair of macrochætæ, a subapical pair extending about to middle of third abdominal segment and a shorter lateral pair. Abdomen no wider than thorax, rather elongate-conical in outline, vaulted, not flattened (♂), first segment hardly shortened; macrochætæ only marginal; hypopygium of male exerted. Legs of moderate length, somewhat bristly, especially the middle and hind tibiæ; claws and pulvilli of ♂ considerably elongated. Wings somewhat longer than abdomen, with strong costal spine, third vein bristly part way to small cross-vein; apical

cell well opened before tip of wing; fourth vein bent at a right angle, with slight wrinkle at bend, apical cross-vein strongly bowed in; hind cross-vein not straight, well approximated to bend of fourth vein. Type, *S. intermedia* n. sp.

Sarcotachinella intermedia n. sp. ♂.—Eyes light brown, frontal vitta black; sides of front, face and cheeks more or less silvery, or slightly brassy, the præ-genal area more or less shining black; the anterior pair of ocellar bristles strong, directed forward; antennæ and arista brown; proboscis black, labella dark brown, palpi blackish and clothed with a few black bristles; occiput black, more or less shining, slightly silvery, black-bristly, with some gray hairs below and a fringe of black hairs on orbital margins. Thorax cinereous, slightly brassy, with three black vittæ nearly reaching scutellum; scutellum mostly black. Abdomen shining black, in some lights with a slight silvery reflection; first segment with one or two lateral macrochætæ, second with a lateral one and a median marginal pair, third with three lateral and a median marginal pair, and anal with twelve or more marginal macrochætæ; hypopygium shining black, hairy. Legs black, femora and tibiæ bristly, femora very slightly cinereous in some lights, pulvilli whitish. Wings grayish hyaline, the costo-basal portions irregularly yellowish along wing-veins; tegulæ nearly white, halteres brownish fuscous. Length of body $5\frac{1}{2}$ mm.; of wing 4.5 mm.

Described from one specimen; Carlinville, Ill. (Chas. Robertson).

Megaprosopus michiganensis n. sp. ♀.—Eyes very dark, almost black, frontal vitta dark brown or blackish, front very prominent in profile, about two-fifths width of head at vertex, much wider before, face nearly twice as wide as front; frontal bristles descending to base of third antennal joint, vertical bristles strongest, and, with two next pairs, directed backward, rest forward and inward, bristly hairs on sides of front, two orbital bristles; sides of front and sides of face brassy pollinose, sides of face very wide, covered with short bristly hairs; cheeks extremely wide, distinctly wider than height of eyes, reddish brown in color, as are also the facial depression and antennæ; third antennal joint small, hardly longer than second joint; arista short, minutely pubescent, thickened more than half its length, about same color as antennæ, 3-jointed, first and second joints short; face very receding, facial ridges bare above constriction, approximated below facial depression for a distance fully as great as length of depression, five pairs of vibrissæ bordering the approximated ridges; facial depression nearly elliptical in outline, rather deep in centre; cheeks bare, except bristles on edges; proboscis brown, short, fleshy, labella well developed, brownish yellow; palpi elongate, slightly thickened at tip, brownish yellow, with black bristles on underside; occiput brassy pollinose, gray-hairy below and sparsely black bristly above. Thorax more or less brassy pollinose, with four more or less distinct dark vittæ; scutellum brassy pollinose, with an apical decussate pair of macrochætæ, three lateral and two discal pairs, the posterior lateral pair strongest, reaching not quite to base of third abdominal segment. Abdomen a little wider than head and thorax, large, broadly oval, blackish, second to fourth segments mostly silvery pollinose. first segment shortened: first segment with one or more lateral macrochætæ, second with a lateral one and a median marginal pair, third with eight or ten marginal, anal with a mar-

ginal and submarginal row, the latter strongest. Legs long, black, greater portion of tibiæ rufous, femora and tibiæ very bristly; claws and pulvilli a little elongate, pulvilli yellowish white. Wings longer than abdomen, broad, with long costal spine, slightly infuscated, tawny on costo-basal portion, apical cell open, ending well before tip of wing; fourth vein bent at an angle, with a strong stump at bend, apical cross-vein strongly bowed in; hind cross-vein bowed, oblique, nearer to bend of fourth vein; tegulæ whitish, borders slightly tawny, halteres brownish yellow. Length of body nearly 14 mm.; of wing 11.5 mm.

Described from one specimen; Constantine, Mich., August 26th.

EUPHOROCERA n. gen.

Belongs in Phoroceratinæ. Very similar to *Tachinomyia* in form and coloration. Differs from that genus as follows: Eyes hairy, facial ridges with bristles nearly to base of third antennal joint; arista thickened about half its length; first abdominal segment shortened; anal segment with marginal and discal macrochætæ; fourth vein with a well-defined wrinkle at the bend; scutellum with only three pairs of lateral macrochætæ. Type, *E. tachinomoides* n. sp.

This genus differs from *Phorocera* in the peculiar elongate-conical form of the abdomen, the exposed hypopygium of the male, and by the vibrissæ being inserted at a considerable distance above the oral margin; the second antennal joint also is usually elongated.

Euphorocera tachinomoides n. sp. ♂.—Eyes dark brown, front silvery with a brassy tinge, frontal vitta dark brown, occupying about one-fourth the width of the front, split behind on each side of the ocelli, the front pair of ocellar bristles elongate, directed strongly forward; three posterior frontal bristles directed backward, the rest more or less forward, decussate; sides of front covered with short hairs, sides of face and cheeks silvery, the latter clothed with fine black hairs; antennæ blackish, first two joints and extreme base of third reddish yellow, arista blackish; proboscis black or brownish, palpi reddish yellow, with black bristles, which are longest on under surface; occiput cinereous, clothed with long gray hair, except bare space below vertex, fringed with a row of black bristles. Thorax cinereous with four well-defined black vittæ; scutellum testaceous, somewhat darker at base, pleuræ silvery. Abdomen black, second to fourth segments broadly silvery at base, sides of first to third segments reddish, a more or less well-defined median black vitta, first and second abdominal segments with median marginal and lateral pair of macrochætæ, third segment with about eight marginal macrochætæ; anal segment with marginal and discal macrochætæ; venter blackish, reddish on sides, somewhat silvery. Legs black, front femora silvery on the outside, tibiæ more or less silvery, furnished with spiny bristles, especially the middle hind hairs, pulvilli yellowish white. Wings grayish hyaline, somewhat tawny at base, tegulæ nearly white, borders narrowly tawny, halteres fuscous. Length of body 13.5 mm.; of wing 10 mm.

Described from one specimen; Las Cruces, N. Mex., April 18th.

PLAGIPROSPHERYSA n. gen.

This genus differs from *Phorocera* in having the eyes bare, and the hind cross-vein more or less oblique and closely approximated to the small cross-vein; it differs from *Prospherysa* in the latter particular, the wing venation being unmistakably of the *Plagia* pattern; it differs from *Plagia* by the ciliate facial ridges. Eyes bare; front about one-third width of head in ♂, face a little wider; frontal bristles descending below base of third antennal joint, vertical and next two, or next three pairs stronger than rest, directed backward, others inward and decussate; no orbital bristles in ♂. Face receding, epistoma prominent; facial ridges ciliate fully as high as lower frontal bristles; facial depression three-fifths or less width of face, moderately deep; vibrissæ strong, decussate, inserted distinctly above oral margin; sides of face moderately wide, bare; cheeks about one-fourth eye-height, more or less hairy. Proboscis about as long as height of head, not very stout, labella well developed; palpi slender, filiform, small. Antennæ shorter than face, second joint a little elongate, third about three or four times as long as second; arista nearly bare, thickened on basal two-fifths, rather indistinctly 3-jointed, second joint not elongate; scutellum with an apical decussate, and three lateral pairs of macrochætæ. Abdomen elongate oval, about same width as head and thorax, first segment hardly shortened; macrochætæ only marginal. Legs long and bristly; claws and pulvilli of ♂ elongate. Wings hardly longer than abdomen, with small costal spine, third vein bristly part way to small cross-vein; apical cell opening on front border of wing a good distance before tip; fourth vein bent at an angle, with a long wrinkle at bend, apical cross-vein more or less concave; hind cross-vein straight or crooked, very oblique, nearer to small cross-vein than to bend of fourth longitudinal. Type, *P. valida* n. sp.

Plagiprospherysa valida n. sp. ♂.—Eyes dark brown, frontal vitta light yellowish brown, sides of front, face and cheeks silvery white, facial ridges pale yellowish; ocellar area cinereous; anterior pair of ocellar bristles strongest, directed forward and outward, vertical and next two pairs of frontal bristles strongest, directed backward; antennæ and arista blackish, second antennal joint brownish yellow, first joint darker, third joint four times as long as the somewhat elongate second joint; proboscis brownish, palpi yellowish; occiput silvery, thickly gray-hairy, fringed with black hairs on orbital margin. Thorax silvery, with a median pair of narrow dark vittæ becoming obsolete beyond suture, and a lateral heavier one obsolete in front, interrupted at the suture, extending nearly to scutellum; scutellum silvery, tawny on apical portions. Abdomen black, the bases of segments two to four broadly silvery white; first

and second segments with a lateral and a median marginal pair of macrochætæ. third with eight or ten marginal, anal with as many marginal macrochætæ. Legs black, femora and tibiæ bristly and more or less silvery on the outside; pulvilli rather elongate, smoky white. Wings grayish hyaline, hind cross-vein nearly straight, very oblique, almost parallel with hind margin of wing; tegulæ white. halteres fuscous. Length of body $6\frac{1}{2}$ mm.; of wing 5 mm.

Described from one specimen; Las Cruces, N. Mex., June 3d.

Plagiprospherysa floridensis n. sp. ♂.—Differs from the preceding species only as follows: Frontal vitta a little broader, more than one-third width of front, vertical and next three pairs of frontal bristles strongest, directed backward; second antennal joint a little more elongate, third joint about three times as long as second and slightly swollen toward tip; scutellum with no brownish yellow on apical portion; hind cross-vein subsinuate or crooked, only a little oblique, much less than in *P. valida*. Length of body 6 mm.; of wing 4.5 mm.

Described from one specimen; So. Florida (Chas. Robertson).

OLENOCHÆTA n. gen.

Moderately small, shining black species, with abdomen more or less cinereous. Belongs in Phoroceratinæ. Head irregular in profile, somewhat quadrilateral; front hardly prominent, fully two-fifths width of head (in ♀), broader before than at vertex, face slightly wider, about one-half width of head; frontal bristles in two rows, descending well below base of third antennal joint, outer rows directed more or less backward, inner ones inward and decussate; no orbital bristles (♀). Face considerably receding, epistoma hardly prominent; facial depression about three-fifths width of face, wider below, moderately deep, with a median carina; facial ridges bristly more than half way up, constricted a little below; sides of face moderately wide, bare; cheeks fully one-fourth eye-height, hairy posteriorly with row of bristles on lower border; vibrissæ moderately stout, not decussate, inserted almost on oral margin. Eyes bare, extending fully four-fifths as low as oral margin. Antennæ shorter than face, inserted above line drawn through middle of eyes, second joint rather short, third three or four times as long as second, somewhat convex on front edge, posterior apical corner rounded; arista short, nearly bare, thickened about three-fourths of its length, 3-jointed and very geniculate, second joint strongly elongate, about as long as thickened portion of last joint. Proboscis shorter than height of head, not stout, labella well developed; palpi slender, thickened at tip, curved. Thorax not wider than head; scutellum with an apical pair of macrochætæ reaching about to base of third

abdominal segment, two lateral pairs the anterior stronger, and a very weak subdiscal pair. Abdomen not wider than thorax, rather oval, vaulted, first segment somewhat shortened; macrochætæ only marginal. Legs of moderate length, somewhat bristly; claws and pulvilli of ♀ a very little elongate. Wings longer than abdomen, with small costal spine, third vein bristly at base; apical cell closed and rather short petiolate, terminating well before tip of wing; fourth vein bent at an obtuse angle, with a rudiment of a wrinkle at bend, apical cross-vein nearly straight; hind cross-vein curved, a little nearer bend of fourth vein. Type, *O. kansensis* n. sp.

Olenochaeta kansensis n. sp. ♀.—Eyes brown, frontal vitta brown, sides of front, face and cheeks silvery white, darker in some lights, anterior pair of ocellar bristles strongest, directed backward at tips; first two antennal joints reddish yellow, third joint and arista blackish, second joint with a bristle on anterior edge; proboscis black, labella brown, palpi pale reddish yellow; occiput blackish, gray-hairy, with fringe of black hairs on orbital margin. Thorax black, grayish pollinose, leaving four more or less well-defined black vittæ; scutellum black, brownish yellow on apical portion. Abdomen black, second to fourth segments brassy-gray pollinose at base; first segment with a lateral macrochæta, second with a lateral one and a median marginal pair, third with about eight marginal, anal with six or more marginal macrochætæ. Legs black, tibiæ bristly, pulvilli dirty whitish. Wings gray, tegulæ whitish, halteres blackish. Length of body nearly 5 mm.; of wing 4 mm.

Described from one specimen; Riley County, Kansas, September (F. A. Marlatt).

EURYCEROMYIA n. gen.

Belongs in the group with *Roeselia*, but differs from that genus in the greatly enlarged third antennal joint. Gray species. Head more or less rectangular in profile; front prominent, very wide, almost three-fifths the width of head; frontal bristles descending a little below base of antennæ, the vertical bristles rather long, the others not stout; vertical bristles very much the strongest, directed backward, others inward and forward; three orbital bristles in the female, the middle one weak, the posterior one directed outward and upward, the other two forward; frontal bristles interspersed with short hairs. Face receding, epistoma not prominent; facial depression very wide, fully two-thirds the width of head, rather shallow; facial ridges forming a nearly circular outline, with a few bristles above the vibrissæ, but not reaching over half way up the face; sides of face narrow, bare; cheeks wide, nearly as high as the height of eyes, bristly behind and below; vibrissæ inserted on the oral margin.

Eyes bare. Antennæ nearly as long as face, first joint small, second joint somewhat swollen, third joint extraordinarily widened, truncate at tip, subtriangular in outline, the front and apical edges straight, the posterior edge somewhat rounded or convex; arista rather short, thickened except at tip, distinctly 3-jointed, the first two joints elongate, especially the second. Proboscis short, fleshy, about one-half the height of head, with well developed labella; palpi small, slender, hardly thickened at tip. Thorax about as wide as head; scutellum with an apical pair of macrochætæ and two lateral pairs besides a weak discal pair. Abdomen hardly wider than the thorax, oblong, first segment somewhat shortened; macrochætæ marginal and discal. Legs of moderate length, sparsely bristly; claws and pulvilli not elongate in the female. Wings about as long as abdomen, with a pair of small costal spines, third vein without spines, first vein spined at base; apical cell not completed, fourth vein straight, becoming obsolete before reaching the wing margin, the apical cross-vein therefore absent; third vein terminating near the tip of the wing; posterior cross-vein at about the middle between the small cross-vein and the disappearance of the fourth vein. Type, *E. robertsonii* n. sp.

Euryceromyia robertsonii n. sp. ♀?—Eyes grayish brown; front, sides of face and cheeks silvery, frontal vitta purplish brown, about one-fourth the width of front, split behind on each side of the ocelli; ocellar bristles directed forward, the front pair strongest, directed also outward; facial depression silvery, antennæ entirely clear rufous, second joint with a bristle on anterior edge, arista dark brown; proboscis brownish, palpi flavous, with some short bristles toward tip; occiput silvery, sparsely clothed with black hairs, except black area below vertex fringed with black bristles. Thorax silvery, with four well-developed black vittæ; scutellum silvery. Abdomen shining black, segments two and three broadly silvery on basal portion, anal segment almost wholly silvery; first segment without macrochætæ, second segment with a lateral pair, and third segment with a median discal pair and a marginal row; anal segment with a discal and marginal row and several lateral subdiscal macrochætæ. Legs black, femora and tibia more or less silvery, bristly; claws and pulvilli not elongate. Wings grayish hyaline; tegulæ nearly white, halteres tawny, knob silvery above. Length of body 7.5 mm.; of wing 6 mm.

Described from one specimen; South Illinois (Robertson).

SIPHOCLYTIA n. gen.

Moderately small cinereous species, with abdomen more or less rufous on sides or at anus. Belongs in Thryptoceratinæ. Head quadrilateral in profile, the occipital longer than the facial profile; front somewhat prominent, about one-third width of head in ♂, a

little narrowed toward vertex, face somewhat widened; frontal bristles in a single row descending to base of third antennal joint, two posterior ones on each side strongest, directed backward, with one or two weak ones between them, others directed inward, decussate; two orbital bristles in ♂ directed strongly forward. Face hardly receding, epistoma hardly prominent; facial depression about three-fifths width of face, wider below, very shallow; facial ridges bare, except a bristle or two next vibrissæ, but slightly constricted below; sides of face moderately narrow, bare; cheeks about one-fifth eye-height, bare except bristles on lower margin; vibrissæ strong, decussate, inserted on oral margin. Eyes bare, descending about as low as vibrissæ. Antennæ a little shorter than face, first two joints short, third four or five times as long as second, moderately wide, rounded at apex; arista rather long, minutely pubescent, thickened slightly on basal third, apparently only 2-jointed, basal joint short. Proboscis somewhat less than twice as long as height of head, slender, nearly straight below geniculation, labella slightly developed; palpi slender, thickened at tip. Thorax about as wide as head; scutellum with a straight subapical pair of macrochætæ reaching almost to base of third abdominal segment, a shorter lateral pair, a weak subdiscal pair, and an extremely weak decussate apical pair. Abdomen rather elongate-conical, about as wide as thorax at base, first segment somewhat shortened, especially above; macrochætæ only marginal; hypopygium of ♂ exerted. Legs elongate, only finely bristly, metatarsi nearly as long as following joints together; claws and pulvilli very short in ♂. Wings a very little longer than abdomen, without costal spine (spine microscopic), third vein bristly part way to small cross-vein; apical cell well opened immediately before tip of wing; fourth vein curved at bend, apical cross-vein bowed in; hind cross-vein nearly straight, a little oblique, but little nearer to bow of fourth vein than to small cross-vein. Type, *S. robertsonii* n. sp.

Siphoelytia robertsonii n. sp. ♂.—Eyes light brown, frontal vitta yellowish brown; sides of front silvery cinereous; face and cheeks silvery-white; anterior pair of ocellar bristles strongest, directed forward and strongly outward; antennæ blackish, first two joints and basal portions of third reddish yellow, second joint with a bristle on front edge, arista black; proboscis black, whitish at base, palpi light reddish yellow; occiput cinereous, gray-hairy below, black-bristly above. Thorax cinereous, with four rather heavy blackish vittæ, the outer ones interrupted at suture; scutellum cinereous. Abdomen blackish, silvery-white pollinose, the sides of first and second segments and whole of anal segment yellowish rufous; second segment with a lateral macrochæta and a median marginal pair, third and anal segments with a marginal row of six or more mac-

rochætæ. Legs blackish except femora, which are light reddish yellow; pulvilli small, smoky whitish. Wings grayish hyaline, tegulæ pearl-white, halteres tawny. Length of body $5\frac{3}{4}$ mm.; of wing $4\frac{1}{2}$ mm.

Described from one specimen; So. Florida (Chas. Robertson).

GINGLYMIA n. gen.

Small species; belongs in Thryptoceratinæ. Head rectangular in profile, about twice as high as long; front prominent, about same width as face, occupying one-half width of head in male, slightly narrowed at vertex; frontal bristles descending nearly to base of third antennal joint, rather sparse, vertical bristles strongest and with two next on each side directed backward, the second pair from vertical bristles stronger than the first pair, the remaining bristles weaker and not directed backward; two orbital bristles in ♂ directed forward. Face nearly perpendicular, epistoma hardly prominent; facial depression about two-thirds width of face, narrower above than below, shallow; facial ridges bare, except two or three very small bristles just next vibrissæ, constriction very slight; sides of face narrow, bare; cheeks narrow, about one-fifth of eye-height, somewhat hairy posteriorly, with bristles on lower border; vibrissæ strong compared with the other bristles, not decussate, barely meeting, inserted at some distance from oral margin, but on a line with its upper border, the oral margin being Ω -shaped between the vibrissæ. Eyes bare, descending well short of vibrissæ. Antennæ about as long as face, inserted high, first joint short, second a little elongate, third not three times as long as second, apex rounded, the posterior apical corner cut off; arista longer than third joint, microscopically pubescent, of about same thickness throughout, distinctly 3-jointed and geniculate, the second joint strongly elongate, fully two-thirds length of final joint. Proboscis considerably longer than height of head, slender, sharp or pointed at tip, without labella, straight below geniculation; palpi rather long, very slender, slightly thickened at tip. Thorax as wide as head; scutellum with an apical and lateral pair of macrochætæ, the former reaching about to middle of second abdominal segment. Abdomen not wider than thorax, elongate-elliptical, slightly vaulted, first segment not shortened; macrochætæ only marginal or submarginal, absent or very weak on first segment; hypopygium exerted. Legs slender, moderately long, not bristly, metatarsi shorter than following joints together; claws and pulvilli very short. Wings a little longer than abdomen, with small costal spine, first vein spined its whole length, third vein

spined as far as small cross-vein ; apical cell ending in tip of wing, narrowly open ; fourth vein only gently curved, apical cross-vein slightly concave ; hind cross-vein straight, perpendicular to fourth vein, a little nearer to curve of fourth vein than to small cross-vein. Type, *G. acirostris* n. sp.

This form might at first sight be taken for a *Thryptocera*, but it is very readily distinguished from that genus by the slender and sharp proboscis.

Ginglymia acirostris n. sp. ♂ ?—Eyes dark brown ; front cinereous, frontal vitta black, very narrow, widening behind on each side of the ocelli ; face, sides of face and cheeks silvery, epistoma with a pale yellowish tinge ; antennæ nearly black, second joint with a short bristle on front edge, arista black ; proboscis grayish at base, remaining portion dark brown ; palpi pale brownish yellow, darker and with short bristles at tip ; occiput cinereous, with some short black bristles above and a fringe of black bristles on border. Thorax cinereous, with four narrow blackish vittæ interrupted at suture ; scutellum cinereous. Abdomen dark brownish, bases of second to fourth segments narrowly silvery, sides of first and second segments and anterior lateral portion of third segment pale brownish yellow, first segment without macrochètæ, second segment with a lateral and a median marginal pair ; third segment with eight or ten marginal, and anal segment with six or eight marginal macrochètæ ; venter pale pearly yellowish, dark brown toward anus ; hypopygium dark brown. Legs pale brownish yellow, the tarsi blackish, femora slightly silvery ; claws and pulvilli short. Wings grayish hyaline, almost imperceptibly smoky ; tegulæ pale yellowish white, halteres pale yellow. Length of body 4.5 mm. ; of wing 3.5 mm.

Described from one specimen ; Constantine, Mich., August 23d.

EULASIONA n. gen.

Medium sized, very bristly and hairy, blackish species. Belongs in Thryptoceratinæ. Head rather triangular in profile, the front very sloping, the oral profile rounded ; front somewhat prominent, extremely narrow posteriorly in ♂, the eyes closely approximated, wide and triangular before, face rapidly widened, fully three-fourths width of head ; frontal bristles all nearly equal, not strong, all directed more or less forward, absent just before vertex, descending in a more or less irregular double row on sides of face as low as lower border of eyes ; no orbital bristles in ♂. Face well receding, epistoma not prominent ; facial depression two-thirds width of face, quite triangular in outline, widest below, shallow ; facial ridges bare, except a few bristles above vibrissæ not extending half way up, constricted below ; sides of face of moderate width ; cheeks rather wide, about one-third eye-height, hairy, with some bristles on lower border ; vibrissæ moderately strong, decussate, inserted on oral margin. Eyes

thickly pubescent, descending three-fourths as low as oral margin. Antennæ nearly as long as face, inserted considerably below a line drawn through middle of eyes, first joint rather short, second somewhat elongate, third fully twice as long as second, rather narrowed, subtruncate at tip; arista moderately long, very short pubescent, thickened on basal third, 3-jointed, second joint short. Proboscis shorter than height of head, somewhat stout, labella very large; palpi reaching about to tip of proboscis, rather slender, thickened toward tip, bristly on underside. Thorax rather stout, fully as wide as head; scutellum with an apical and three lateral pairs of macrochætæ, the apical pair reaching to middle of second abdominal segment. Abdomen hardly as wide as thorax, elongate-conical, very bristly and hairy, first segment strikingly elongate; macrochætæ numerous, discal and marginal; hypopygium of ♂ exserted. Legs somewhat long, not stout, femora hairy, tibiæ somewhat bristly; claws and pulvilli of ♂ rather elongate. Wings longer than abdomen, wide at base, narrowing toward tip, with very small costal spine, third vein with a bristle or two at base; apical cell ending in tip of wing, open; fourth vein curved at bend, apical cross-vein nearly straight, hind cross-vein more or less bent, about in middle between small cross-vein and bend of fourth. Type, *E. comstocki* n. sp.

Eulasiona comstocki n. sp. ♂.—Eyes cinnamon-brown, frontal vitta very narrow, brown; sides of front, face and cheeks silvery-white, darker in some lights; ocellar bristles in a tuft, the front pair a little the strongest, directed forward, as are also the others; antennæ and arista black; proboscis brown, palpi black, black-bristly; occiput dark cinereous, black-hairy. Thorax blackish, with an indistinct pair of darker vittæ becoming lost near suture, humeri silvery; scutellum black, black-hairy. Abdomen black, long-hairy and bristly, segments two to four broadly silvery-white at base; all segments densely set with marginal and discal macrochætæ, except first which is without discal; hypopygium blackish. Legs black, femora hairy, tibiæ bristly; pulvilli yellowish fuscous. Wings grayish hyaline internally, broadly smoky golden on basal and costal portions, tegulæ golden, halteres yellow. Length of body $6\frac{2}{3}$ mm.; of wing 5.5 mm.

Described from one specimen; Ithaca, N. Y. (J. H. Comstock.)

EMPHANOPTERYX n. gen.

Moderately large species. Belongs in Thryptoceratinæ. Very closely allied to *Eumyothyria*, from which it differs only as follows: Sides of face clothed with short hairs, cheeks hairy; arista microscopically pubescent. Proboscis stout, labella large; palpi large, elongate, reaching tip of proboscis, club-shaped. Macrochætæ discal,

subdiscal and marginal. Third vein bristly at base; apical cell open, ending just before tip of wing; fourth vein at most with a very slight stump at bend. Type, *E. eumyothyroides* n. sp.

Emphanopteryx eumyothyroides n. sp. ♂ (?).—Eyes light brown, frontal vitta light brown, more or less silvery in some lights; sides of front, face and cheeks silvery cinereous; front pair of ocellar bristles strongest, directed forward and outward; two orbital bristles; antennæ and arista brownish, first two antennal joints brownish rufous, second joint very bristly and with a strong bristle on front edge; proboscis brown, palpi pale brownish yellow; occiput silvery cinereous, gray-hairy below, black-bristly above. Thorax silvery cinereous, with four heavy black vittæ which become obsolete before reaching scutellum; scutellum silvery-cinereous. Abdomen blackish or dark brown, almost wholly silvery-cinereous pollinose, except posterior margins of segments; first segment with a lateral pair and a median marginal pair of macrochætæ; second with a lateral, median marginal, median submarginal and discal pair; third with a discal pair and eight or ten marginal; fourth with marginal, submarginal and discal macrochætæ. Legs brownish rufous, tarsi blackish, femora somewhat silvery, femora and tibiæ bristly, especially latter; pulvilli somewhat elongate, fuscous. Wings grayish hyaline; tegulæ nearly white, edges slightly tawny, halteres tawny. Length of body 8.5 mm.; of wing 8.5 mm.

Described from one specimen; Ithaca, N. Y., May 21st (J. H. Comstock).

EUMYOTHYRIA n. gen.

Medium sized species, grayish or pale ochereous, somewhat resembling *Pseudatractocera*, but readily distinguished from that genus by the much longer wings. Belongs in Phytinæ. Head quadrilateral in profile, the frontal longer than the oral profile; front prominent, about one-third width of head in middle (♂?), narrower at vertex, wider before, face about twice as wide; frontal bristles in a single row, descending to base of third antennal joint, the vertical bristles longest, and, with the next pair, directed backward; two orbital bristles (♂?) directed forward. Face receding, epistoma hardly prominent; facial depression fully one-half width of face, wider below, moderately shallow; facial ridges bare, except a few bristles next vibrissæ, constricted below; sides of face rather wide, bare; cheeks wide, one-half eye-height, nearly bare; vibrissæ quite strong, decussate, inserted well above oral margin. Eyes bare, extending three-fourths as low as oral margin. Antennæ shorter than face, inserted high, second joint rather elongate, third joint about three times as long as second, rather narrow; arista long, nearly bare, thickened on basal third or more, 3-jointed, second joint short. Proboscis shorter than height of head, stout, fleshy, labella large; palpi

well developed, elongate, reaching tip of proboscis, club-shaped, thickened on apical portion. Thorax as wide as head; scutellum with an apical divergent pair of macrochætæ reaching about middle of second abdominal segment, and two lateral pairs. Abdomen not wider than thorax, elongate-oval, strongly vaulted, first segment not shortened; macrochætæ discal and marginal. Legs elongate, bristly; claws and pulvilli (♂?) moderately elongate. Wings much longer than abdomen, without costal spine, third vein not spined at base; apical cell ending just before tip of wing, closed in border; fourth vein curved or slightly angular at bend, without stump or wrinkle, apical cross-vein a little concave; hind cross-vein more or less sinuate, nearer to bend of fourth vein. Type, *E. illinoiensis* n. sp.

Eumyothyria illinoiensis n. sp. ♂ (?).—Eyes and frontal vitta light brown; sides of front, face and cheeks silvery gray; anterior pair of ocellar bristles only a little stronger than posterior pair, directed forward; antennæ brownish yellow, third joint dark brown distally, arista brownish; proboscis yellowish brown, palpi yellowish; occiput cinereous above, silvery gray below, sparsely gray-hairy below. Thorax silvery gray, with a median pair of narrow brown vittæ running beyond the transverse suture, and a heavier vitta outside which is interrupted at the suture; scutellum very pale luteous, silvery. Abdomen pale brownish yellow, more or less silvery; first segment with several lateral macrochætæ and a median marginal pair, second with a lateral pair and a median marginal and discal pair, third with a discal pair and about eight marginal, anal with weaker discal and marginal ones. Legs pale brownish yellow, except tarsi which are black, femora and tibiæ somewhat bristly, and femora slightly silvery; pulvilli dirty whitish. Wings grayish hyaline, very slightly tawny toward base; tegulæ nearly white, halteres yellowish white. Length of body 6 mm.; of wing $6\frac{1}{2}$ mm.

Described from one specimen; Carlinville, Ill. (Chas. Robertson) The abdomen of this specimen is considerably bent downward, which makes the body measurement given above somewhat less than the actual measurement.

SARCOCLISTA n. gen.

Moderately small cinereous species. Belongs in Phytinæ. Head very irregularly semicircular in profile; front considerably projecting, about one-third width of head at vertex in ♀, widening before, face nearly twice as wide; frontal bristles descending a little below base of antennæ, in a single row, vertical bristles strongest and directed backward, next bristle directed outward and a little backward, rest more or less inward; two orbital bristles in ♀. Face considerably receding, epistoma not prominent; facial depression fully one-half width of face, wider below, oval in outline, shallow; facial

ridges bare, except a few bristles above vibrissæ, well constricted below; sides of face wide, with a row of hairs near orbital margin; cheeks about two-thirds high of eyes, bare before, hairy posteriorly, with bristles on lower margin; vibrissæ not strong, inserted but little above oral margin. Eyes bare, descending three-fifths as low as oral margin. Antennæ much shorter than face, second joint hardly elongate, third about one and one-half times as long as second, more or less rounded; arista moderately long, microscopically pubescent on basal half, thickened basally, 3-jointed, second joint short. Proboscis hardly as long as high of head, moderately stout, labella large; palpi moderately slender, hardly thickened at tip. Thorax not wider than head; scutellum with a strongly decussate apical pair of macrochætæ reaching nearly to base of third abdominal segment, three lateral and one discal pair. Abdomen wider than thorax, elongate round, flattened, first segment hardly shortened; macrochætæ only marginal. Legs of moderate size and length, bristly; claws and pulvilli of ♀ a little elongate. Wings very much longer than abdomen, with very small costal spine, third vein somewhat bristly at base; apical cell closed in margin, or extremely short petiolate, terminating a little before tip of wing; fourth vein bent at obtuse angle, with a slight wrinkle at bend, apical cross-vein bowed in; hind cross-vein more or less curved, oblique, nearer to bend of fourth vein. Type, *S. dakotensis* n. sp.

Sarcoelista dakotensis n. sp. ♀.—Eyes brown; frontal vitta blackish; sides of front, face and cheeks cinereous with a slight brassy reflection, the area between sides of face and cheeks light brown; anterior pair of ocellar bristles strongest, directed forward and outward; antennæ reddish brown, third joint brownish, arista brownish black; proboscis blackish, labella brown, palpi yellowish brown; occiput cinereous, sparsely black hairy, fringed with black hairs on orbital margins. Thorax grayish cinereous, with three black vittæ reaching nearly to scutellum; scutellum cinereous. Abdomen almost entirely cinereous, clothed with black hairs; first and second segments with a lateral pair of macrochætæ, second segment also with a median marginal pair, third and anal segments each with about eight marginal macrochætæ, those on anal segment set more closely together. Legs blackish, femora somewhat cinereous on outside, femora and tibiæ bristly; pulvilli fuscous. Wings grayish, tegulæ whitish, halteres more or less dusky. Length of body 6 mm.; of wing 5.5 mm.

Described from one specimen; Brookings, S. Dak. (J. M. Aldrich.)

EUSCOPOLIA n. gen.

Moderately small, shining black species. Belongs in Phytinæ. Head nearly hemispherical in profile; front rounded, not prominent,

fully one-half width of head before (♀), much narrower at vertex, face nearly twice as wide as vertical width of front; frontal bristles in a single row, descending nearly to base of third antennal joint, short and weak, vertical bristles longer and directed backward, others inward; no orbital bristles in ♀. Face receding, epistoma not prominent; facial depression about one-half width of face, much widened below, somewhat triangular in outline, rather deep; facial ridges with a few bristles above vibrissæ extending less than half way up, considerably constricted below; sides of face wide, bare; cheeks more than two-thirds of eye-height, hairy posteriorly, bristly on lower border; vibrissæ weak, not decussate, inserted nearly on oral margin, hardly distinguishable amongst the other bristles. Eyes bare, descending about three-fifths as low as oral margin. Antennæ nearly as long as face, inserted nearly on line drawn through middle of eyes, second joint a little elongate, third joint about three and one-half times as long as second, not wide, straight, posterior apical corner well rounded; arista rather short, bare, thickened basally, tapering to point, jointed at base, basal joint short. Proboscis short, fleshy, about one-half height of head, labella large; palpi slender, thickened at tip. Thorax as wide as head; scutellum with an apical and two lateral pairs of macrochætæ, the apical pair scarcely reaching base of second abdominal segment. Abdomen broader than thorax, rounded oblong, first segment not shortened; macrochætæ (?) weak, only marginal. Legs moderately stout, including tarsi, not very bristly; claws and pulvilli a little elongate (♀). Wings hardly as long as abdomen, rather narrow, without costal spine, third vein spined more than half way to small cross-vein; apical cell closed and long petiolate, the third vein terminating considerably before wing tip; fourth vein bent at a right angle, with a stump of a vein at the angle, apical cross-vein straight; hind cross-vein straight, nearly in middle between small cross-vein and angle of fourth, or slightly nearer the small cross-vein. Type, *E. dakotensis* n. sp.

Euscopolia dakotensis n. sp. ♀.—Eyes dark brown, frontal vitta brown; sides of front, sides of face and cheeks shining black, facial depression brown; anterior pair of ocellar bristles strongest, directed forward and strongly outward; antennæ yellowish brown, the third joint blackish distally, arista brownish yellow; proboscis blackish, palpi yellowish brown; occiput shining black, with some very short black hairs. Thorax, scutellum and abdomen shining black, macrochætæ weak. Legs black; very little bristly, pulvilli fuscous. Wings grayish hyaline, the costal border and portions along wing veins smoky; tegulæ whitish, borders pale yellowish, halteres blackish. Length of body 6 mm.; of wing 4 mm.

Described from one specimen; Brookings, S. Dak. (J. M. Aldrich.)

CHÆTOGLOSSA n. gen.

Rather small, shining black species, with abdominal segments silvery at base. Belongs in *Phytoinæ*. Head irregularly quadrilateral in profile; front rather prominent, a little more than one-half width of head in ♀, slightly wider before, face about one-half width of head; frontal bristles in two rows on each side, the inner row descending obliquely nearly to or a little below third antennal joint; two inner vertical bristles strongest, posterior three or four of each row directed backward, a little stronger than anterior ones, which are directed more or less inward, particularly those of inner rows; posterior ones of outer rows directed also outward, and those of inner rows inward; two to five orbital bristles in ♀ directed forward, often one of them is weaker, and may be directed either forward or backward. Face a little receding, epistoma somewhat prominent; facial depression more or less triangular, in the mean from three-fifths to two-thirds width of face, widest below, moderately deep, but divided into two furrows by a well developed median carina; facial ridges ciliate to within short distance of base of third antennal joint, a little constricted below; sides of face wide above, very narrow below, bare; cheeks narrow, bare except some bristles on or near lower border; vibrissæ moderately strong, inserted on a line with oral margin, but somewhat removed from its sides. Eyes bare, descending a little short of vibrissæ. Antennæ fully as long as face, second joint slightly or hardly elongate; third joint four to six times as long as second, noticeably swollen toward tip, the posterior apical corner more rounded than anterior; arista much shorter than third antennal joint, bare, thickened throughout, apex sharpened, distinctly 3-jointed, and usually geniculate, second joint very long, from one-half to two-thirds as long as last joint, distinctly curved or bowed. Proboscis about twice as long as height of head, the apical three-fourths or more below geniculation extremely fine and bristle-like, flattened, basal portion of latter slightly or considerably elongate bulbous, tip usually curved forward or upward, sometimes cleft, no labella; palpi well developed, more or less slender and filiform, or thickened at tip. Thorax narrower than head; scutellum with a weak apical pair of macrochætæ, a strong subapical pair exceeding middle of second abdominal segment, and two shorter lateral pairs. Abdomen hardly broader than thorax, somewhat elongate oval,

slightly vaulted, first segment somewhat shortened; macrochætæ marginal and discal, at least on anal segment, present on all segments. Legs of moderate length, somewhat bristly, femora rather stout, metatarsi somewhat shorter than following joints together; claws and pulvilli very short (♀). Wings as long as abdomen, with well-marked costal spine, third vein bristly at base; apical cell closed and rather long petiolate, petiole terminating on front border of wing well before tip; fourth vein bent at an oblique angle, without stump or wrinkle at bend, apical cross-vein nearly straight; hind cross-vein straight, or nearly so, a little nearer to small cross-vein than to bend of fourth vein, or about in the middle between the two. Type, *C. picticornis* n. sp.

Chaetoglossa picticornis n. sp. ♀.—Eyes brown, frontal vitta brownish rufous; sides of front nearly black, shining; face and cheeks flesh colored, silvery-white pollinose; antennæ wholly clear orange, second joint slightly elongate, arista dark brown; proboscis black, palpi light orange; occiput blackish, black-bristly. Thorax shining black, slightly silvery, leaving three very heavy more or less distinct black vittæ; scutellum shining black, slightly silvery. Abdomen shining black, bases of segments two to four silvery; first and second segments with a lateral macrochætæ and a median marginal pair, third with about eight marginal, anal with a marginal and discal row of shorter ones. Legs black, femora and tibiæ somewhat bristly; pulvilli short, smoky whitish. Wings grayish hyaline, pale tawny at base; tegulæ nearly white. Halteres blackish, rufous at base. Length of body 5 mm.; of wing 3.5 mm.

Described from two specimens; So. Florida (Chas. Robertson).

Chaetoglossa violæ n. sp. ♀.—Differs from *C. picticornis* as follows: Antennæ and arista black, except first two antennal joints, which are pale rufous, third antennal joint somewhat longer and heavier toward tip, second joint not elongate; vittæ and macrochætæ same. Wings rather rufous at base, tegulæ almost white. Length of body 4–5 mm.; of wing 3–3.5 mm.

Described from three specimens; So. Florida (Chas. Robertson). This was named *violæ* on the suggestion of Mr. Robertson, who found it to frequent more particularly the flowers of *Viola*.

Chaetoglossa nigripalpis n. sp. ♀.—Differs from *C. picticornis* as follows: Antennæ like *C. violæ*, except third joint proportionally longer; face and cheeks more distinctly silvery-white; vittæ of thorax same. Abdominal macrochætæ same, except that third segment has in addition a discal pair. Wings rufous at base, tegulæ almost white. Length of body 9 mm.; of wing 4 mm.

Described from one specimen; So. Florida, February 23d (Chas. Robertson).

SIPHOPHYTO n. gen.

Small, blackish species, the abdominal segments edged basally with silvery. Belongs in Phytoinae. Head nearly rectangular in profile; front hardly prominent, from two-fifths to three-sevenths width of face (? ♀), slightly wider before than at vertex, face a little wider still; frontal bristles in a single row descending to base of third antennal joint, vertical and next two bristles stoutest, directed backward; two orbital bristles directed forward (♀). Face nearly perpendicular; epistoma rather prominent, oral margin with a Ω -shaped cleft in middle; facial depression occupying about seven-ninths width of face, moderately deep, wider below; facial ridges bare, except two or three bristles next vibrissæ, constricted below; sides of face very narrow, bare; cheeks less than one-fourth eye-height, bare except a few hairs posteriorly and some bristles on lower border; vibrissæ rather strong, but not decussate, inserted at a considerable distance from oral margin, but on a line with upper portion of cleft. Eyes bare, descending almost as low as vibrissæ. Antennæ hardly or a little shorter than face, inserted high, first two joints short, third joint four or more times as long as second, nearly straight or somewhat dished on front edge, posterior apical corner rounded; arista not longer than third antennal joint, microscopically pubescent, thickened two-thirds or more of its length, tapering to point, 3-jointed and hardly or distinctly geniculate, first joint indistinct, second considerably elongate and distinctly bowed. Proboscis one to one and one-half times as long as height of head, slender, straight below geniculation, with very small labella; palpi slender, not long, more or less thickened at tip. Thorax as wide as head; scutellum with an apical, slightly or not decussate, pair of macrochætæ reaching to base of third abdominal segment, a shorter lateral pair, and a weak subdiscal pair. Abdomen not wider than thorax, rather oval, not elongate, first segment not shortened, though appearing strongly so from above; macrochætæ only marginal, unless on anal segment. Legs not stout, only fine bristly; metatarsi nearly as long as following joints together; claws and pulvilli very short. Wings a little longer than abdomen, with small costal spine, third vein spined at base, or nearly to small cross-vein; apical cell closed in margin at tip of wing; fourth vein curved at an oblique angle, without stump or wrinkle, apical cross-vein nearly straight; hind cross-vein nearly straight, almost perpendicular, in middle between small cross-vein and bend of fourth, or slightly nearer to small cross-vein. Type, *S. floridensis* n. sp.

Siphophyto floridensis n. sp. ♀ (?).—Eyes light brown, frontal vitta brownish orange; sides of front silvery, darker in some lights; face and cheeks silvery-white; front pair of ocellar bristles strongest, directed strongly outward and a little forward; antennæ and arista black, first two antennal joints reddish brown, second joint bristly on front edge; proboscis dark brown, palpi light yellow; occiput cinereous, with some gray hairs below and a fringe of black hairs on orbital margin. Thorax silvery, with four narrow dark vittæ, which become obsolete near suture; scutellum blackish, more or less silvery. Abdomen shining black, bases of segments two to four narrowly silvery-white; first and second segments with a lateral macrochæta, third with a lateral pair and a median marginal pair, anal with a marginal row of eight or more macrochætae. Legs black, femora and tibiæ somewhat bristly; pulvilli small, whitish. Wings grayish hyaline, tegulæ nearly white, halteres light brownish. Length of body fully 4 mm.; of wing slightly more than 3 mm.

Described from one specimen; So. Florida (Chas. Robertson).

Siphophyto neomexicanus n. sp. ♀.—Eyes brown, frontal vitta brownish yellow, about one-third width of front; sides of front, face and cheeks silvery; anterior pair of ocellar bristles but little stronger than posterior pair, directed forward and outward, posterior pair also directed forward; antennæ brown, first two joints brownish rufous; arista brownish, slightly geniculate, second joint elongate; proboscis blackish, palpi pale yellowish; occiput cinereous, sparsely black hairy. Thorax silvery cinereous, with two narrow dark vittæ, which disappear near suture; scutellum silvery cinereous. Abdomen shining black, bases of segments two to four narrowly silvery-white; second segment with a lateral macrochæta, third with a lateral pair and a median marginal pair, anal with a marginal row of six or more. Legs blackish, femora slightly silvery on outside, especially front ones; pulvilli very small, whitish. Wings grayish hyaline, very pale tawny at base; tegulæ pearl-white, halteres pale yellowish. Length of body 4 mm.; of wing 3.5 mm.

Described from one specimen; Las Cruces, N. Mex., Sept. 21st.

CORONIMYIA n. gen.

Small species; belongs in Phytinæ. Head rectangular in profile; front and face (♀) about equal width, a little narrowed at vertex, where the front occupies nearly three-sevenths width of head, while the face occupies one-half width of head; frontal bristles descending below base of third antennal joint, not very stout, rather sparse; the two vertical bristles strongest and directed backward, three next bristles on each side directed backward, rest more or less forward; apparently only one orbital bristle in female, which is directed forward. Face perpendicular, epistoma quite prominent; facial depression occupying about five-sixths of facial width, nearly equal width above and below, shallow; facial ridges entirely bare, except two or three minute bristles immediately above vibrissæ, but

little constricted below; sides of face very narrow, bare; cheeks not as wide as one-fourth of eye-height, with some hairs and bristles on lower portion; vibrissæ not strong, not decussate, inserted a little above oral margin. Eyes bare, descending a little short of vibrissæ. Antennæ only a little shorter than face, inserted high, first two joints short, third five or more times as long as second, moderately wide but linear, truncate at tip, the apical corners rounded; arista about as long as third joint, microscopically pubescent, thickened more than half its length, distinctly 2-jointed and geniculate, no distinct basal joint, the next to last joint (second joint strictly speaking) elongate. Proboscis two and a half to three times as long as height of head, slender, without labella, strongly curved backward before tip; palpi slender, but considerably thickened at tip, not long. Thorax somewhat narrower than head; scutellum with an apical and lateral pair of macrochætæ, the former not decussate, and but little exceeding middle of second abdominal joint. Abdomen hardly wider than thorax, elongate-oval, first segment shortened; macrochætæ only marginal, absent or weak on first two segments. Legs slender, rather long, with only fine bristles, metatarsi as long as following joints together, front tarsi nearly or quite twice as long as tibiæ; claws and pulvilli very short in female. Wings longer than abdomen, moderately broad, with very small costal spine, wing-veins unspined; apical cell terminating at wing apex, closed in the margin; fourth vein curved, without stump or wrinkle, apical cross-vein almost straight; hind cross-vein nearly straight, perpendicular to fourth vein, in middle between small cross-vein and bend of fourth. Type, *C. geniculata* n. sp.

Coronimyia geniculata n. sp. ♀ (?).—Eyes nearly black, front silvery, with a slight golden tinge, frontal vitta golden-brown, very short, about one-third the width of front, split behind enclosing the ocelli; face, sides of face and cheeks silvery-white, the latter pale golden posteriorly and below; first and second antennal joints reddish brown, third joint and arista blackish, second antennal joint with a curved bristle on front edge; proboscis brown at geniculation, blackish at tip, palpi pale brownish yellow, with some very small bristles toward tip; occiput cinereous, with a golden tinge on borders, and a few short bristles on upper portion. Thorax cinereous, with a slight yellowish tinge, and with four narrow black vittæ more or less interrupted at the suture; scutellum yellowish cinereous. Abdomen brownish black, second and third segments slightly yellowish cinereous at base, and with anal segment broadly so on sides; sides of first, second, and anterior portion of third segments brownish yellow; first segment without macrochætæ, second segment with a lateral one; third segment with a lateral marginal pair, fourth segment with six marginal macro-

chætæ; venter pale brownish yellow, blackish toward anus. Legs blackish, with only very fine bristles, claws and pulvilli short. Wings grayish hyaline; tegulæ whitish, with a slight yellowish tinge on borders, halteres pale yellowish. Length of body almost 5 mm.; of wing $4\frac{1}{3}$ mm.

Described from one specimen; S. Illinois (Robertson).

TACHINOPHYTO n. gen.

Moderately small black species, with abdominal segments edged with silvery at base. Belongs in Phytinæ. Head more or less triangular in profile; front somewhat prominent, fully one-third width of head at vertex (♀), widening toward antennæ, face wider still, about one-half width of head; frontal bristles in a single row, descending about to base of third antennal joint, vertical bristles strongest, next bristle of each row weak, third bristle nearly as strong as vertical pair, all three pairs directed backward, the other bristles weaker, directed inward and decussate; two strong orbital bristles directed strongly forward. Face receding, epistoma not prominent; facial depression nearly three-fifths width of face, wider below, rather triangular in outline, shallow, with a slight median carina; facial ridges with several bristles above vibrissæ, which do not extend over one-third way up, constricted only a little below; sides of face moderately wide, bare; cheeks about one-fourth of eye-height, more or less hairy, with bristles on lower border; vibrissæ strong, well curved, decussate, inserted a little above oral margin. Eyes nearly bare, microscopically, sparsely hairy, descending considerably short of vibrissæ. Antennæ inserted above a line drawn through middle of eyes, somewhat shorter than face, first joint short, second elongate, third about twice as long as second, moderately narrow, rather convex on front edge, posterior apical corner rounded; arista long, thickened on basal fourth, microscopically pubescent, distinctly 3-jointed, first two joints short. Proboscis short, little more than half as long as height of head, fleshy, labella large; palpi nearly reaching end of proboscis, club-shaped, well thickened toward tip. Thorax hardly narrower than head; scutellum with a strong, decussate apical pair of macrochætæ reaching about to base of third abdominal segment, two shorter lateral pairs, and a very weak subdiscal pair. Abdomen but little wider than thorax, rather oval in outline, slightly vaulted, first segment not shortened; macrochætæ rather stout, all marginal. Legs moderately long, bristly; claws and pulvilli short. Wings not much longer than abdomen, rather broad, with strong

costal spine, third vein spined at base; apical cell closed in tip of wing; fourth vein curved at bend, apical cross-vein bowed in; hind cross-vein straight, a little oblique, in middle between small cross-vein and bend of fourth. Type, *T. floridensis* n. sp.

Tachinophyto floridensis n. sp. ♀.—Eyes brown, frontal vitta brownish; sides of front, face and cheeks silvery-white, vertex somewhat cinereous, anterior pair of ocellar bristles strongest, directed forward and outward; antennæ and arista blackish, second antennal joint brownish at base; proboscis brown, labella tawny; palpi deep yellow, dusky at base; occiput cinereous, sparsely gray-hairy and black-bristly. Thorax silvery cinereous, with two narrow blackish vittæ, and an outer less distinct one, interrupted at suture; scutellum silvery cinereous. Abdomen shining black, bases of segments two to four silvery at base, in some lights the whole abdomen appearing more or less silvery, first and second segments each with a lateral one and a median marginal pair of macrochætæ, third with eight, and anal with six or eight marginal. Legs black, femora more or less distinctly silvery, femora and tibiæ bristly; pulvilli small, yellowish white. Wings grayish hyaline, tegulæ nearly white, halteres tawny, knobs dark rufous. Length of body 5.5 mm.; of wing 4 mm.

PSEUDOMYOTHYRIA n. gen.

Small blackish species, with thorax and bases of abdominal segments silvery. Belongs in Phytinæ. Head rather triangular in profile, oral profile short; front (♀?) nearly one-third width of head, nearly equal in width, somewhat prominent in profile, face a little wider; frontal bristles in a single row, rather strong, descending about to base of third antennal joint, vertical and second next pair strongest, about equal, the vertical and next three pairs directed backward, rest more or less inward; two orbital bristles (♀?). Face receding, epistoma hardly prominent; facial depression about two-thirds width of face, somewhat triangular in outline, moderately deep; facial ridges bristly not quite to base of third antennal joint, constricted below; sides of face narrow, bare; cheeks narrow, about one-sixth eye-height, more or less bristly below; vibrissæ moderately strong, decussate, inserted a little above oral margin. Eyes bare, descending almost as low as vibrissæ. Antennæ but little shorter than face, second joint hardly elongate, third joint fully three times as long as second, narrow, posterior apical corner rounded; arista moderately long, microscopically pubescent, thickened on basal half, indistinctly jointed at base. Proboscis short, rather stout, labella developed; palpi elongate, club-shaped, thickened toward tip. Thorax not wider than head; scutellum with a short apical pair of macrochætæ, and three strong lateral pairs, the posterior lateral pair

nearly reaching base of third abdominal segment. Abdomen not wider than thorax, elongate-oval, first segment hardly shortened; macrochætæ marginal and discal. Legs not long, only a little bristly; claws and pulvilli (♀?) very short. Wings hardly longer than abdomen, with costal spine, third vein bristly at base; apical cell closed in margin just before tip of wing; fourth vein curved, apical cross-vein nearly straight; hind cross-vein in middle between small cross-vein and bend of fourth vein. Type, *P. indecisa* n. sp.

Pseudomyothyria indecisa n. sp. ♀.—Eyes light brown, frontal vitta dark brown; sides of front, face and cheeks silvery, anterior pair of orbital bristles strongest, directed forward and outward; antennæ and arista brown or blackish; proboscis brown, palpi yellow; occiput cinereous, sparsely black-hairy. Thorax silvery, with two narrow dark vittæ, which are lost near suture; scutellum black, more or less silvery. Abdomen deep shining black, segments two to four narrowly silvery white at base, first segment with a lateral and a median marginal pair of macrochætæ, second with a lateral pair and a median marginal and discal pair, third with a discal pair and six or more marginal ones, anal segment with marginal and discal macrochætæ. Legs black, femora and tibiæ more or less bristly; pulvilli small, whitish. Wings grayish hyaline, tegulæ nearly white, halteres fuscous. Length of body 4.5 mm.; of wing 3.5 mm.

Described from one specimen; Carlinville, Ill. (Chas. Robertson)
